

INDEX OF AUTHORS' NAMES

ABSTRACTS A and B, 1926.

An asterisk denotes a previous abstract. Patents are marked (P.)

Anonymous.

Firthall (chromate) method for [determining] minimal amounts of lead in fractal specimens, A., 592.
filtration apparatus, A., 932.
official method [of Society of Leather Trades Chemists] of quantitative tannin analyses, B., 454.
report on the heterogeneity of steel ingots, B., 490, 893*.
properties of high-silicon structural steels, B., 545.
regulations proposed following lead tetraethyl investigation, B., 619.
soil studies at the Wisconsin Experiment Station, B., 799.

A.

A.C. Spark Plug Co., burning ceramic wares, (P.), B., 489*, 747*.
A.P.I.C.E. Soc. an. Prod. Italiani Chimici Estrattivi. See Vellardi, G.
Ardiot, H. See Goldschmidt, H.
Aarhus Oliefabrik A.-S., and Hansen, K. H., process of adding A-vitamins to oils, (P.), B., 140.
Aarnio, B., influence of electrolytes on the absorption of hydrogen ions, A., 1090.
Aarts, J. G., carbon from coal, lignite, peat, wood, and waste material containing these substances, (P.), B., 308.
Abadie, J. B. J. M., and Courtines, N. M., electric discharge tubes with rarefied atmospheres, (P.), B., 676.
Abbeira, J. F. See Crawford, P. H.
Abbott Laboratories, manufacture of *n*-butyl esters of aminobenzoic acids, (P.), B., 692.
process for making arsonophenylaminoalcohols, (P.), B., 851.
Abbott Laboratories, and Raiziss, G. W., process for producing 3 : 5-di(acetoxymercuri)-4-nitro-*o*-cresol and its compounds, (P.), B., 935.
Abbott Laboratories. See also Adams, R., and Thayer, F. K.
Abder-Halden, C., manufacture of prepared tar for road-surfacing, B., 232.
continuous distillation of tar and like substances and continuous rectifying of their by-products, (P.), B., 1006.
Abderhalden, E., results of thyroidectomy, A., 318.
biocatalysts concerned in carbohydrate metabolism, A., 325.
alcoholic fermentation by dried yeast, A., 543.
effect of growth of yeast on galactose on the fermentability of the latter by the former, A., 544.
influence of piperazines and piperazine derivatives on the fermentation of dextrose by yeast, A., 544.
separation of *l*-leucyl-d-glutamic acid and its anhydride from a trypsin digest of gliadin, A., 852.
Abderhalden, E., and Behrens, M., tyrosinase, A., 542.
Abderhalden, E., and Buadze, S., cleavage of polypeptides composed of amino-acids not yet found among the breakdown products of proteins. VII. Cleavage of polypeptides containing *d*-phenyl-arginine, A., 544.
synthesis of urea from ammonium hydrogen carbonate solution by animal charcoal, tissue pulp, or blood, A., 1276.
Abderhalden, E., and Gebelein, F., decarboxylation of amino-acids, and preparation of the enol form of 2 : 5-diketopiperazines, A., 623.
Abderhalden, E., and Gutmann, A. B., specificity of tyrosinase, A., 1276.
Abderhalden, E., and Haas, R., methylation of diketopiperazine and piperazine, A., 79.
methylated piperazines, A., 181.
structure of proteins; physical and chemical properties of diketopiperazines; fumaric acid as a hydrolytic product of gelatin, A., 312.
reaction product from glycylglycine, A., 716.
spectrographic investigation of amino-acids, 2 : 5-diketopiperazines, peptones, and proteins, A., 959.
physical behaviour of amino-acids, polypeptides, 2 : 5-diketopiperazines, in their tautomeric modifications, and proteins. II., A., 960.
Abderhalden, E., and Kohl-Egger, compounds of amino-acids with piperazines, A., 1047.
Abderhalden, E., and Paffrath, H., hormonal action of choline on the motor function of the alimentary tract. I., A., 97.
Abderhalden, E., Paffrath, H., and Sickel, H., hormonal action of choline on the motor functions of the alimentary tract. II., A., 97.
Abderhalden, E., Pieper, H., and Tateyama, R., action of yeast maceration juice on *d*-leucyl-*l*-aminobutyric acid, A., 545.
Abderhalden, E., and Quast, H., structure of proteins; comparative oxidation experiments, A., 312.
Abderhalden, E., and Rossner, E., polypeptides, in the synthesis of which glutamic acid is concerned, and their derivatives, A., 603.
Abderhalden, E., and Schwab, E., structure of proteins; conversion of *d*- and *l*-peptides into anhydrides; reduction of gelatin, A., 83.
desmotropic forms of diketopiperazines, A., 181.
desmotropic forms of diketopiperazines, their formation, and combination with amino-acids, A., 306.

Abderhalden, E., and Schwab, E., structural isomerism of 2 : 5-diketopiperazines and polypeptides, A., 630.
formation of 2-hydroxypyrroline-5-carboxylic acid from glutamic acid and the conversion of the former compound into 2-hydroxypyrrolidine-2-carboxylic acid, A., 734.
desmotropic forms of 2 : 5-diketopiperazines and polypeptides, A., 740.
comparative behaviour of hydroxypyrroline- and pyrrolidone-carboxylic acids towards ozone, A., 956.
isomeric forms of 2 : 5-diketopiperazines; action of ozone on the enol and keto forms of 2 : 5-diketopiperazines and on dipeptides, A., 959.
structure of proteins, A., 1259.
Abderhalden, E., and Sickel, H., proline, A., 630.
structure of the compound $C_4H_10O_2N_2$ obtained from caseinogen by enzymic digestion, A., 748.
exhaustive methylation of *l*-leucylproline; formation of hydroxycyclamido-acid amides from halogenoacylamido-acids in aqueous ammonium hydroxide, A., 1235.
Abe, R. See Kita, G.
Abe, Y., properties and origin of lymph. XI. Influence of specific lymphagogues on the activity of the liver, detected by acetone formation, A., 195.
Abel, E., and Stadler, F., kinetics of the reaction between iodic and hydriodic acids, A., 1009.
Abel, J. J., crystalline insulin, A., 1063.
Abelin, J., carbohydrate metabolism. I. Importance of phosphate in carbohydrate metabolism, I., A., 1170.
Abelin, J., Goldener, E., and Kobori, B., importance of fat in the action of the thyroid gland on metabolism; theory of the action of the thyroid gland, A., 973.
Abelin, J., carbohydrate and phosphate metabolism, A., 639.
Abelius, N., toxicity of hexosediphosphoric acid, A., 200.
Abelous, J. E., and Soula, L. C., cholesterol-synthesizing function of the spleen; influence of internal secretion of the spleen on cholesterol in muscle, A., 204.
Aborn, R. H. See Clark, G. L., and Frdlich, P. K.
Abraham, A. C., and Rae, J., loss of morphine in powdered opium by keeping, B., 766.
Abrams, D. A., studies of bond between concrete and steel, B., 91.
design of concrete mixtures, B., 275.
Abrasive Co. See Brockbank, C. J.
Accarini, D. See Finzi, C.
Achalme, J. See Achalme, P.
Achalme, P., hydrolysis of sucrose solutions by invertase, A., 977.
Achalme, P., and Achalme, J., influence of the viscosity on the specific rotation of certain active substances, A., 778.
Acheson, E. G., treating lubricating oils, (P.), B., 575.
Acheson, G. W., process for making rubber compositions, (P.), B., 23.
process for making a deflocculated product, (P.), B., 224.
treating bituminous substances [desulphurising oils], (P.), B., 352.
refining and decolorising bitumens, (P.), B., 397.
process of deflocculating solids [graphite], (P.), B., 857, 1000*.
Acheson Graphite Co. See Lavene, H. A.
Achmatowicz, O., action of hydrogen chloride on naphthalene, A., 731.
Acieries Réunies de Burbach-Eich-Dudelange Société Anonyme, [ring and roll] cru-hers, (P.), B., 392.
Ackeren, J. van, and Koppers Co., inclined coking retort oven, (P.), B., 181*.
cooking retort oven, (P.), B., 350.
standpipe apparatus [for carbonisation plant], (P.), B., 524.
Ackeren, J. van. See also Koppers Co.
Ackermann, A. A., bleaching and purifying alkaline-earth sulphates, especially barium sulphate, (P.), B., 321.
Ackermann, C. L., bearing metal, (P.), B., 197.
Ackermann, D. See Kutschler, F.
Ackermann, W., measurements with the quinhydrone electrode, A., 813.
Acklin, O., *Bacillus pyocyanus*; relation of its metabolism to intramolecular respiration, A., 203.
Ackman, F. D., relation between gastric acidity and hydrogen-ion concentration of the urine; effect of histamine, A., 859.
Ackman, F. D. See also Rosenthal, S. M.
Acme Steel Co. See Kronquest, W. C.
Adachi, M. See Miyake, K.
Adair, G. S., osmotic pressure of haemoglobin in absence of salts, A., 21.
Adam, M. A., [recovery of tin by] electrolysis [from tinned iron], (P.), B., 757.
Adam, M. A. See also Davies, H.
Adam, N. K., and Jessop, G., structure of thin films. VII. Critical evaporation phenomena at low compressions, A., 348.
spreading of solids on water surfaces, A., 348.
"gas laws" in surface solutions, A., 468.
structure of thin films. VIII. Expanded films. IX. Dibasic substances, A., 1002.
insoluble films on water surfaces, A., 1093.
Adam, N. K., Morrell, R. S., and Norrish, R. G. W., comparison of methods of measuring polarity of surfaces, A., 120.

Adam, W. See Kühl, H.

Adams, A. R. See Englis, D. T.

Adams, B., iodoform taste of chlorinated water, B., 389.

Adams, C. E. See Gilman, H.

Adams, C. F., gas [hydrogen] manufacturing machine, (P.), B., 703.

Adams, E. Q., efficiency of photosynthesis by *Chlorella*, A., 308.

electrostatic virial of strong electrolytes, A., 474.

use of subscript and superscript exponents in chemistry, A., 493.

relation between composition and b. p., A., 568.

range of α -particles in various media, A., 1076.

Adams, F. D. See Buckman, T. E.

Adams, F. W., and Kean, R. H., measurement of surface temperatures. II., B., 397.

Adams, F. W. See also Haslam, R. T.

Adams, J. H., converting [cracking] hydrocarbon oils, (P.), B., 183.

Adams, J. H., and Texas Co., conversion of [hydrocarbon] oils, (P.), B., 623.

apparatus for conversion of oils, (P.), B., 864.

Adams, L. V. See British Thomson-Houston Co., Ltd.

Adams, N. H. See British Thomson-Houston Co., Ltd.

Adams, R., Dreger, E. E., Volkwiler, E. H., and Abbott Laboratories, anesthetic compound, (P.), B., 851.

Adams, R., and Garvey, B. S., selective reduction of citral by means of platinum oxide-platinum-black and a promoter. XII., A., 600.

Adams, R., Rideal, E. K., Burnett, W. B., Jenkins, R. L., and Dreger, E. E., chemical constitution, physiological action, and physical properties in a series of alkyl *p*-aminobenzoates, A., 834.

Adams, R. See also Brode, W. R., Calvery, H. O., Van Dyke, R. H., Hiers, G. S., Noller, C. R., Sacks, J., Shriner, R. L., Supanowski, J. V., and Vliet, E. B.

Adams, W. C. See De Groot, M.

Adamson, W. A., Carleton, P. W., and Du Pont de Nemours & Co., E. I., recovery of antimony in the manufacture of flavanthrone, (P.), B., 625.

Adcock, F., effect of nitrogen on chromium and some iron-chromium alloys, B., 829.

Addenbrooke, G. J., non-metallic elements; connexions between their dielectric and other physical properties, A., 225.

Adeline, M., Cerecedo, L. R., and Sherwin, C. P., detoxication of nitriles, A., 1372.

Adeney, W. E., rate and mechanism of aeration of water under open-air conditions, B., 934, 1039.

Adeney, W. E., and Dawson, (Miss) B. B., determination of organic matter in water by means of potassium dichromate and sulphuric acid, B., 934.

Adhikari, G. See Volmer, M.

Adda, A. See Delépine, M.

Adinolfi, E., absorption spectrum of potassium and calcium permanganates, A., 659.

Adkins, H., and Lazier, W. A., reactions of the alcohols over zinc oxide catalysts, A., 807.

Adkins, H. See also Lazier, W. A.

Adler, A., behaviour and action of bile acids in the organism, A., 430, 1057.

Adler, M. See Fichter, F., and Fromm, E.

Adlerberg, D., and Taubenhaus, M., behaviour of the precursor of ammonia in blood and its importance in the regulation of neutrality, A., 855.

blood pressure, blood-cholesterol, and diuresis after administration of bile-acids, A., 1273.

Adolf, M. See Siegel-Adolf.

Adolph, E. P., alkaloids produced by ingesting urea, A., 1172.

Ados G.m.b.H., and Hensen, A., apparatus for the examination of gas mixtures, especially flue gases, (P.), B., 309.

determination of the constituents of gas mixtures, (P.), B., 309.

Adova, A. N. See Smorodincev, I. A.

Adriani, W. See Filippo, J. D.

Aeschlimann, F. See Zetzsche, F.

Agathon, O. See Briner, E.

Agde, G., fractional dissolution in alcohol of zinc salts of liquid acids derived from linseed oil, A., 269.

production of crystallised sulphates of iron, copper, zinc, and nickel, (P.), B., 915.

Agde, G., and Alberti, E., fire risk of concentrated hydrogen peroxide solutions, B., 821.

Agde, G., and Assmann, P., producing a hydraulic cement from copper slag, B., 408.

Agde, G., and Barkholt, H., separation of copper and ferrous sulphates by crystallisation, B., 707.

Agde, G., and Klemm, R., aluminous cements, B., 275.

Ageno-Valla, E., and Astengo, R., [tanning properties of] complex chromium salts, B., 716.

Ageno-Valla, E., and Bornate, G., alkaline hydrolysis of hide, B., 715.

Ageno-Valla, E., and Raposo, B., organic chromium salts, A., 930.

Aginides, E., influence of fertilisers and of micro-organisms on the hydrogen-ion concentration of soils; new method for determining p_{H_i} , B., 892.

Agnew, J. B., and Offner, A. A., heating system for kilns, (P.), B., 113.

Agricultural Education Association, Sub-Committee, mechanical analysis of soils; report on the present position and recommendations for a new official method, B., 292.

Agt, F. P. G. A. J. van, isotherms of diatomic substances and their binary mixtures. XXXII. Behaviour of hydrogen according to the law of corresponding states, A., 233.

Agt, F. P. G. A. J. van, and Onnes, H. K., measurement of very low temperatures. XXXII. Thermal expansion of Jena glass 16*H*, A., 231.

Isotherms of monatomic substances and their binary mixtures. XXXV. The same for diatomic substances. XXXXI. Compressibility of hydrogen and helium between 90° and 14° Abs., A., 234.

measurement of very low temperatures. XXXIII. Comparison of the constant volume hydrogen and helium thermometers with various zero-point pressures, A., 264.

Agt, F. P. G. A. J. van. See also Keesom, W. H.

Agt, K., Schönborn, H., and Schröder, K., determination of the grain-size of tungsten powder, B., 60.

Agt, K., Becker-Rose, H., and Heyne, G., determination of small quantities of foreign elements in scheelite, tungstic acid, and metallic tungsten, B., 60.

Ahmann, C. F., and Hooker, H. D., constitution of pectin, A., 821.

determination of pectin, B., 460.

Ahmed, B. See Bhatnagar, S. S.

Ahrens, H. See Bredt, J.

Ahrns, W., reciprocal relationship between carbohydrates in foliage leaves and water content, A., 1063.

Air Liquide. See L'Air Liquide.

Air Reduction Co., and Van Nuyts, C. C., processes for the separation of the constituents of ternary gaseous mixtures, (P.), B., 1000.

Air Reduction Co. See also Metzger, F. J., Recorder, C. E., and Van Nuyts, C. C.

Airship Guarantee Co., Ltd., and Teed, P. L., manufacture of hydrogen and other gases, (P.), B., 639.

Aische, M. I., manufacture of soap, (P.), B., 795.

Aische, M. I. See also Hall, A. J., and Marsh, J. W.

Aitkenhead, W. C. See Nelson, R. E.

Aitkin, M. F., and Reade, T. H., action of nitrous acid on *p*-iododimethylaniline, A., 916.

Aiyer, A. R. P. See Annett, H. E.

Ajon, G., direct crystallisation of citric acid from lemon juice, B., 214, 963.

Akabori, S., synthesis of hydroxymethoxy-*N*-methyl-3:4-dihydroisoquinolinium salts, A., 957.

Akerlöf, G., neutral salt effect in the acetochloroanilide \rightarrow *p*-chloroacetanilide rearrangement as a function of hydrogen-ion activity, A., 125.

Akerlöf, G. See also Harned, H. S.

Akers, A. T. See Mills, W. H.

Akiba, R., rennin-like action of pepsin, A., 866.

Akkerman, J. H., evaporating liquids by atomising, (P.), B., 729.

Aktiebolaget Ferrolegreningar, manufacture of low-carbon iron-chromium alloys [stainless iron], (P.), B., 196.

Aktiebolaget Ferrolegreningar. See also Berlin, D. W., and Daniell, S. D.

Aktiebolaget Ljungströms Angturbin, apparatus for effecting transfer of heat between fluids, (P.), B., 729.

Aktiebolaget Oskarshamns Kopparverk, treatment [purification] of zinc sulphate solutions, (P.), B., 156.

Aktiebolaget Separator, producing wort, (P.), B., 251.

centrifugal machines, (P.), B., 391.

centrifuges, (P.), B., 392.

process of cleaning centrifugal bowls, (P.), B., 472.

centrifugal separators, (P.), B., 615, 856.

purification of used lubricating oil, (P.), B., 655.

Aktiebolaget Separator, and Boyd, F. R. C., purification and reclaiming of lubricating oil, (P.), B., 904.

Aktiebolaget Separator, and Hall, S. H., apparatus for preventing the aeration of centrifugally treated liquids [lubricating oil], (P.), B., 184°.

Aktiebolaget Separator, and Miller, P. F., reclaiming used lubricating oil, (P.), B., 1004.

Aktiebolaget Vaporackumulator. See Ruths, J.

Aktion-Gesellschaft für Anilin-Fabrikation, manufacture of *o*-[hydr]oxyazo-dyes, (P.), B., 86°.

recovering constituents from muds produced in purification of cellulosic alkali lyes with heavy metals, (P.), B., 153.

manufacture of non-deliquescent solid material from sulphite, cellulose waste liquor, (P.), B., 188, 534.

manufacture of sulphite dyes, (P.), B., 211.

colourless compounds containing sulphur and suitable for adsorption on textile fibres and other substrata, (P.), B., 596.

decolorising solutions of cellulose derivatives, (P.), B., 704.

copying drawings, printed matter, etc. by photography, (P.), B., 722.

photographic silver halide emulsions, (P.), B., 722.

treatment of cellulose with nitric acid, (P.), B., 739.

manufacture of azo-dyes, (P.), B., 816.

manufacture of graphite, (P.), B., 916.

photographic copying, (P.), B., 997.

Aktion-Gesellschaft für Anilin-Fabrikation, and Brodersen, K., manufacture of solid, non-hygroscopic products from cellulose waste lyes, (P.), B., 739.

Aktion-Gesellschaft für Anilin-Fabrikation, Fuchs, R., and Wolff, Hugo, measurement of relative humidity [in technical drying processes], (P.), B., 34.

Aktion-Gesellschaft für Anilin-Fabrikation, Kaltwasser, O., Kirchhoff, H., and Oehr, H., *o*-hydroxyazo-dye, (P.), B., 7.

Aktion-Gesellschaft für Anilin-Fabrikation, and Lange, W., manufacture of substantive green azo-dyes, (P.), B., 735.

Aktion-Gesellschaft für Anilin-Fabrikation, Lange, W., and Neumann, L., substantive green azo-dyes, (P.), B., 432.

Aktion-Gesellschaft für Anilin-Fabrikation, and Langer, H., pharmaceutical product, (P.), B., 771.

Aktion-Gesellschaft für Anilin-Fabrikation, and Marian, T., production of tanning agents, (P.), B., 24.

Aktion-Gesellschaft für Anilin-Fabrikation, Spenzler, O., and Müller, W., manufacture of [organic] sulphocyano-derivatives, (P.), B., 805°.

Aktion-Gesellschaft für Anilin-Fabrikation, Vorländer, F., and Weber, H., electrode for use in the contact process of making sulphuric acid, (P.), B., 125.

Aktion-Gesellschaft für Brennstoffvergasung, and Hubmann, O., distillation of coking coal, (P.), B., 573.

Aktion-Gesellschaft Chemiewerte, manufacture of quinine salts, (P.), B., 608.

performing chemical reactions, (P.), B., 967.

Aktion-Gesellschaft für Chemische Industrie in Liechtenstein. See Thalhofer, W.

Aktion-Gesellschaft für Chemische Produkte vorm. H. Scheidemandel, transforming glue, gelatin, etc. in melted or solution form to granules or pearls, (P.), B., 990.

Aktion-Gesellschaft für Chemische Produkte vorm. H. Scheidemandel, and Braun, H. J., purifying pho-phoric acid and preparing pure phosphates, (P.), B., 236.

Aktion-Gesellschaft für Chemische Produkte vorm. H. Scheidemandel, Obersohn, A., Wachtel, W., and Sakom, D., solidifying liquid colloids, (P.), B., 178.

Aktion-Gesellschaft für Industriewerte and Früh, J., continuous production of water-gas and producer-gas, (P.), B., 309.

Aktion-Gesellschaft für Ozon-Ind. See Graef, R.

Aktion-Gesellschaft für Stickstoffdünger, manufacture of fertiliser containing urea, (P.), B., 336.

manufacture of caustic soda, (P.), B., 630.

Aktion-Gesellschaft für Stoffstoff- & Papier-Fabrikation, and Steinschreider, M., production of sulphur, sulphur compounds, and hydrocarbons from sulphite-cellulose waste liquor, (P.), B., 580.

Aktieselskapet Krytal and Aktieselskabet de Norske Saltverker, vessels in which solids are suspended in liquids for lixiviation and crystallisation, (P.), B., 31.

Aktieselskabet de Norske Saltverker, magnesium hydroxide, (P.), B., 322.

Aktieselskabet de Norske Salverker. See also Aktieselskabet Krystal.
 Aktieselskabet Thunes Mek. Vaerksted. See Heyerdal, F. F.
 Albach, F., apparatus for quenching coke, (P.), B., 527.
 Albers, V. M., photo-electric valve coated with potassium, A., 3.
 Albert, A. See Deutsche Gold- & Silber-Scheideanstalt vorm. Roessler.
 Alberti, E. See Arde, G.
 Albery, H. G. See Bentzon, A. G.
 Alizzati, C., method of Denigts for the determination of acetone, A., 984.
 Albrecht, E. W., removal of printers' ink from old paper, B., 356.
 Albrecht, W. See Wedekind, E.
 Albrecht, W. A., and Uhlund, R. E., nitrate accumulation under a straw mulch, B., 25.
 Alcock, H. E. See Webber, I. E.
 Alden, R. C. See Oberfell, G. G.
 Aldrich, H. W. See Arsdale, G. D. ran.
 Aldrich, M. See Hench, P. S.
 Aldridge, J. G. W., Carr, W. M., and Ashley, T. J., stand-pipes for use in the manufacture of coal gas, (P.), B., 477.
 Alessandri, L., reactions of nitroso-derivatives with unsaturated compounds. III and IV. Dinitrines corresponding with α -diketonic acids, A., 287, 1038.
 Alexander, C. M., decomposing oils, (P.), B., 430.
 Alstilling [hydrocarbon] oils, (P.), B., 623.
 Alexander, G. J., copper at low temperatures, A., 1110.
 Alexander, J. E., method of drying material [paper], (P.), B., 627.
 Alexander, J. E. See also McBain, B. T., and White, A. H.
 Alexander, P., arc welding in hydrogen and other gases, B., 550.
 Alexanderson, N. A., preserving wood, (P.), B., 632.
 Alexeef, A. L., blood-clotting content in mountain and valley dwellers in middle Asia, A., 855.
 Alexeef, D., active molecules in chemical equilibria, A., 680.
 rate of unimolecular reactions, A., 32.
 Alexeef, D., and Polukarov, M., influence of cathodic hydrogen on the strength of steel, B., 550.
 Alford, S. See Mitchell, L. C., and Smith, E. R.
 Ali-Cohen, E. S., manufacture of composite material comprising absorbent material and rubber and articles made of or embodying such composite material, (P.), B., 598.
 Alimari, E., essential oil of the needles of *Pseudotsuga Douglasii*, B., 690.
 Alaire, H. See Javillier, M.
 Allan, H. L., heat-exchange device [for fractionating hydrocarbons], (P.), B., 232.
 Allan, H. L. See also Burmah Oil Co.
 Allan, J., Oxford, A. E., Robinson, R., and Smith, J. C., relative directive powers of groups of the forms RO and RR'N in aromatic substitution. IV., A., 397.
 Allan, J., and Robinson, R., relative directive powers of groups of the forms RO and RR'N in aromatic substitution. I., A., 306.
 synthesis of fisetin and querectin, A., 1149.
 Allan, W. G., and Clarke, F. G., electrolytic apparatus, (P.), B., 835.
 Alarit, H. G. See Auwers, K. von.
 Albright-Nell Co. See Laabs, W.
 Alchemie Allgemeine Chemische Industrie Aktien-Gesellschaft, and Lichtenstein, R., laying the dust on roads, (P.), B., 409.
 Allocut, C. T., and Westinghouse Electric and Manufacturing Co., high-frequency dielectric and magnetic furnace, (P.), B., 497.
 Allen, A. See Pearl, R.
 Allen, R. S., and Murkin, J. R., burst-free insulin, A., 1063.
 Allen, R. W. See Bogert, M. T.
 Allen, S. J. M., absorption of X-rays of wave-length down to 0.08 Å, A., 447.
 Allen-Liversidge, Ltd. See Stephenson, A.
 Alles, G. A., comparative physiological action of guanidine derivatives, A., 1057.
 Alles, R. See Badische Anilin- & Soda-Fabrik.
 Allgemeine Elektricitäts-Gesellschaft, conservation of transformer oils, (P.), B., 550.
 Allgemeine Elektricitäts-Gesellschaft, and Blomberg, H., direct case-hardening of iron articles in molten cyanide baths, (P.), B., 329.
 Allgemeine Elektricitäts-Gesellschaft. See also Internat. Gen. Electric Co., Inc.
 Allgemeine Gesellschaft für Chemische Industrie, separating glycerides from fats and oils, (P.), B., 332.
 production of light hydrocarbons, (P.), B., 396.
 fuels for internal-combustion engines, (P.), B., 621.
 Allgemeine Vergasungs-Ges.m.b.H., scrubbing hot gases for the recovery of hydrocarbons, (P.), B., 6.
 Allibone, T. E., infra-red secondary spectrum of hydrogen, A., 873.
 Allied Process Corporation. See Weidmann, H.
 Allin, K. D. See Harding, J.
 Allinger, M., manufacture of potassium hydroxide from crude potassium salts, (P.), B., 788.
 Allison, J. J., and Doherty Research Co., treatment and refining of mineral oils, (P.), B., 863.
 Allis-Chalmers Manufacturing Co., and Newhouse, R. C., [gyratory] crushers, (P.), B., 520.
 Allis-Chalmers Manufacturing Co. See also Greenfield, R. C., and Newhouse, R. C.
 Allison, F. E. See Braham, J. M.
 Allison, J. B., and Hixon, R. M., synthesis and properties of γ -chlorodiacetone-glucose [γ -chloroglucose diisopropylidene ether], A., 386.
 Allison, S. K., L_{11} levels of the atoms silicon, phosphorus, sulphur, and chlorine, A., 214.
 selective reflexion of X-rays by crystals of potassium bromide, A., 447.
 Allison, S. K., and Armstrong, A. H., wave-lengths and relative intensities in the molybdenum K-series X-ray spectrum, A., 103.
 relative intensities of some X-ray lines in the L-spectrum of tungsten and the K-spectrum of copper, A., 103.
 separation and relative intensity of the components of the K β line in the X-ray spectrum of molybdenum, A., 1186.
 Allison, S. K., and Dzane, W., Compaction effects, A., 1187.
 "Allkog" Allgemeine Kohlenverwertungs-Ges.m.b.H., distillation of coal and other fuels, (P.), B., 308.
 Allmand, A. J., Einstein's law of photochemical equivalence, A., 584.
 mechanism of the ozone-chlorine reaction, A., 585.
 Allmand, A. J., and Barklie, R. H. D., influence of alternating currents on the electrolytic corrosion of iron, B., 277, 497.
 Allmand, A. J., and Cocks, H. C., effect of superposed alternating current on the polarisable primary cell zinc-sulphuric acid-carbon, II. High-frequency current, A., 612.
 polarisation of zinc electrodes in neutral and acid solutions of zinc salts by direct and alternating currents. I., A., 912.
 Almer, W., measuring dust in air and industrial gases, B., 111.
 evaporation of mineral oils and its bearing on the use of oil-sprinkled air-filters, B., 144.
 Allott, G. W. See Miles, T. V.
 Alloys Co. See Newell, M. H.
 Alloys Foundry Co. See Spitzley, R. L.
 Allpress, C. F., transformation of monomethylfructose into derivatives of γ -fructose, A., 942.
 Allwater, R., and Heinemann, A., artificial [silk] fibre and process of manufacture, (P.), B., 782.
 Almqvist, J. A., and Crittenden, E. D., catalytic removal of oxygen from gas mixtures containing hydrogen [ammonia-synthesis gases], B., 820.
 Almy, L. H., rôle of proteolytic enzymes in decomposition of the herring, B., 800.
 Aloy, J., Valdigue, A., and Aloy, R., reactions produced by sunlight in the presence of uranium [and iron] compounds; characteristic reactions for strychnine, morphine, codeine, and formaldehyde, A., 850.
 Aloy, R. See Aloy, J.
 Alpern, D., rôle of electrolytes in the innervation mechanism of secretory processes. I. Effect of vegetable poisons on the activity and electrolyte content of the saliva of the submaxillary gland. II. Effect of section and stimulation of the nerve fibres on the activity and electrolyte content of the saliva of the submaxillary gland, A., 858.
 Alpren, D., and Lindenbaum, L., nitrogen equilibrium during secretion under normal and pathological conditions of gland innervation, A., 1163.
 Alphen, J. ran, action of phenylhydrazine and hydrazine on fats and fatty acids, A., 46.
 Alpier, J. See Randon, L.
 Alsborg, C. L., studies on starch, B., 336.
 Alsborg, C. L., and Griffing, E. P., effects of fine grinding upon flour, B., 381.
 Alsborg, C. L., Griffing, E. P., and Field, J. jun., preparation of starch solution for use in iodometric titrations, A., 701.
 Alsterberg, G., analysis of iodides, and standardisation of permanganate and thiosulphate solutions, A., 374.
 Winkler's method for the determination of dissolved oxygen and its use in the presence of oxidisable substances, A., 591.
 determination of sulphurous acid and sulphites, A., 928.
 Alsterberg, G., and Håkansson, A., Manoloff's sex-determination reaction, A., 1267.
 Alstyne, J. W., [sulphite-pulp] digester, (P.), B., 633.
 Alt, A. See Tillmans, J.
 Altai, M. See Weiss, I.
 Alten, F. See Blanch, E.
 Altherum, H., and Korel, F., vapour pressure of carbon, A., 233.
 Altegeit, H., Hochmuth, O., and Kalle & Co., enzymes and process of isolating them from their solutions, (P.), B., 688.
 Altmann, M., influence of temperature on phosphoric acid in fatigued muscle, A., 427.
 Altweig, J., Chermette, E. F., and Société Chimique des Usines du Rhône, condensation products of compound aliphatic-aromatic ketones with poly-alcohols, (P.), B., 462.
 Altweig, J., Mailhard, C. A., and Société Chimique des Usines du Rhône, purification of cellulose ethers, (P.), B., 1010.
 Altwicker, H., influence of cuprous oxide on electrolytic and refined copper, B., 243.
 Aly, S. See Edwards, E.
 Aly, T., phenomena occurring at the surface of bubbles in water, A., 230.
 origin of the electric charge on small particles in water, A., 1096.
 Aluminium-Industrie A.-G., aluminium alloy wire, (P.), B., 197.
 aluminium alloy for motor pistons, (P.), B., 330.
 Aluminum Co. of America. See Archer, R. S., Frary, F. C., Hoopes, W., Jeffries, Z., Johnston, R. L., Pacz, A., and Tilson, D. H.
 Aluminum Die-Casting Corporation. See Johnston, R. L.
 Aluminum Manufacturers, Inc. See Crosby, E. R.
 Amadori, M., condensation products of dextrose and p-phenacetidine, A., 60.
 Amagat, S. See Ramar, (Muc.) P.
 Amann, A. See Chem. Fabr. K. Albert.
 Amar, J., irradiation and chlorophyll, A., 872.
 cellular pigments and physico-chemical action, A., 872.
 Ambard, L., Schmid, F., and Arnovyevitch, M., application of enzyme laws to the oxidation of dextrose in healthy and diabetic animals, A., 325.
 Amborg, S., and Sawyer, F., rate of filtration of protein solutions, particularly of mucin, A., 1205.
 Ambler, H. R. See Sutton, T. C.
 Ambros, O. See Willstätter, R.
 Amer, A. See Brüll, M.
 American Beccari Corporation. See Cooke, E. P.
 American Bemberg Corporation. See Elsaesser, E.
 American Brass Co. See Coe, J. R.
 American Briquet Co. See Parker, A. D.
 American Cellulose & Chemical Manuf. Co., Ltd. See Dreyfus, C., and Ellis, G. H.
 American Copperas Co. See Marsh, H. S.
 American Creosoting Co. See Austin, H. E.
 American Cyanamid Co. See Barsky, G., Buchanan, G. H., Cooper, K. F., Freise, F. W., Heuser, R. V., and Landis, W. S.
 American Demulsifying Co. See Leeper, W. D.
 American Doucil Co. See Wheaton, H. J.
 American Dressler Tunnel Kilns, Inc. See Dressler, C., and Meehan, P. A.
 American Electro-Osmosis Corporation. See Jenny, A., Ruppel, W., and Wolf, Kuno.
 American Laundry Machinery Co., dyeing, washing, and like apparatus, (P.), B., 357.
 American Lurgi Corporation. See Klencke, H.
 American Magnesium Corporation. See Balken, H. E., Harvey, W. G., Hunt, A. M., Jeffries, Z., and Keeler, L. J.
 American Manganese Steel Co., heat treatment of manganese steel, (P.), B., 61.
 American Metal Co., Ltd. See Schleicher, H. M.
 American Rolling Mill Co. See Beck, W. J.

American Shale Reduction Co., distilling oil shale, bituminous coal, and the like to obtain light hydrocarbons, (P.), B., 119.

American Sheet and Tin Plate Co. See Porter, R.

American Smelting and Refining Co., separating antimony and lead, (P.), B., 635.

American Smelting and Refining Co. See also Labbe, A. L., and Stack, J. R.

American Telephone and Telegraph Co. See Gardner, L. A.

American Trona Corporation. See Mumford, R. W.

American Zinc, Lead, & Smelting Co. See Wempler, L. E.

Amino, *G.*, beryllium oxide as a mineral, and its crystal structure, A., 227.

(Swedenborgite), a new mineral from Långban, A., 266.

Annon, *E.* See Oberhofer, P.

Ammonia, extraction of hydrogen contained in industrial gases and chiefly in coke-oven gas, (P.), B., 440.

Amos, A. See Woodman, H. E.

Amouroux, *G.* See Berthelot, A.

Anaconda Copper Mining Co. See Frick, F. F., and Laist, F.

Anastasi, *C.*, alkaloid of *Jucusrotin montervidensis*, A., 744.

Anderegg, L. T., and Nelson, V. E., milk powders as food. II. Existence of vitamin-E, B., 643.

Andersson, H. See Fischer, Hans.

Andersson, A. C., and Jensen, B. M., determination of nitrogen by Kjeldahl's method, A., 375.

Andersson, C. N. See Bogert, M. T.

Andersson, F., and Trollhättans Elektrothermiska Aktiebolag, electric rotating resistance furnace, (P.), B., 498.

Anderson, A. B., and Carruthers, A., carbohydrate metabolism. I. Relation between optical activity and reducing power of normal blood filtrates. II. Interaction of muscle-tissue, inulin, and dextrose, A., 861.

Anderson, A. E., Mairi, G., and Bossini, R. F., refrigerating machines for absorption of ammonia or any other substances having the same properties, (P.), B., 938.

Anderson, A. P. See Anderson Puffed Rice Co.

Anderson, C. T. See Maier, C. G., and Parks, G. S.

Anderson, E., relation between water permeability and water absorption of concrete, B., 193.

Anderson, E., and International Precipitation Co., apparatus for electrical separation of suspended material from gases, (P.), B., 176.

Anderson, E., and Sands, L., preparation of *t*-arabinose from mesquite gum, B., 169.

Anderson, E. A. See Pearce, W. M.

Anderson, E. L., apparatus for hydrogenating [and cracking] oils, (P.), B., 1004.

Anderson, G. C., and Hassel, O., structure of crystalline sodium hydrogen fluoride and the form of the HF⁻ion, A., 1194.

Anderson, J. See British Alizarine Co., Ltd., and Kreisinger, H.

Anderson, J. A., influence of available nitrogen on the fermentation of cellulose in the soil, B., 457.

Anderson, J. S. See Karpansky, S.

Anderson, L., comparison of methods used in estimating the maturing of terra cotta, B., 128.

Anderson, M. S., and Mattson, S. E., relation between properties and chemical composition of soil colloids, A., 352.

Anderson, P. A., free energy and heat of transfer of barium in its liquid amalgams, A., 1102.

Anderson, R. J., crystal structure of durelumin, A., 562.

Anderson, R. S. See Nelson, J. M.

Anderson Puffed Rice Co., and Anderson, A. P., puffed [food] products, (P.), B., 206.

Ando, K., system, water and the nitrates of potassium and ammonium at 25°, A., 20.

effect of salts on the solubility of glycine and tyrosine, A., 898.

Ando, K. See also Osaka, Y.

Andrade, E. N., Da C., and Lewis, J. W., hydrodynamic behaviour of ammonium oleate solutions, A., 470.

André, E., oils of chanmoogra group, B., 98.

André, E., and Canal, H., marine animal oils; calamary [*Toiarus sagittatus*, Lk.] oil, B., 758.

André, E., and Francois, T., marine animal oils; sperm whale oil and spermaceti, B., 247.

saturated aliphatic alcohols from sperm whale oil and spermaceti, B., 987.

Andre, F., and Grasselli Dyestuffs Corporation, making 2-hydroxynaphthalene-6-carboxylic acid, (P.), B., 869.

Andreas, A. See Wickling'sche Portland-Cement & Wasserkalkwerke.

Andreassch, R., carbamide and guanidine derivatives of aliphatic sulphonic acids. III. and IV., A., 277, 819.

Andreasen, A. H. M., action of citric acid solutions of varying ammonia content on di- and tri-calcium phosphate, B., 991.

Andreevskii, A. See Ipatiev, V. N.

Andreasen, G. See Brahm, C.

Andrews, K., and Berl, E., heat of wetting of active carbon, A., 910.

Andrew, G. W. See Bone, W. A.

Andrew, J. H., crystalline structure of metals, B., 278.

Andrew, J. H., and Dickie, H. A., physical investigation into the cause of temper-brittleness [of steels], B., 826.

Andrew, J. H., and Fisher, M. S., and Robertson, J. M., some physical properties of steel and their determination, B., 242.

specific volume determinations of carbon and chromium steels, B., 277.

Andrew, J. H., and Hay, R., colloidal separations in alloys, A., 344°; B., 328°.

Andrew, J. H., and Higgins, R., dilatation of cast iron during repeated heating and cooling, B., 162°.

Andrews, (Mits) U., Davies, (Mits) A. C., and Horton, F., soft X-ray absorption limits of certain elements, A., 214.

Andrews, C. W. See Brassert, H. A.

Andrews, B. H., specific heats of isomerides of the type *o*-, *m*-, and *p*-C₆H₄NY from 110° to 340° Abs., A., 668.

distribution of thermal energy in organic molecules, A., 1087.

Andrews, D. H., Lynn, G., and Johnston, J., heat capacities and heats of crystallisation of some isomeric aromatic compounds, A., 668.

Andrews, D. H. See also Francis, A. W.

Andrews, J. C., optical activity of cysteine, A., 1027.

Andrews, J. P., elasticity and melting point, A., 462.

Andrieux, electrolysis of oxides dissolved in boric acid or in borates, A., 248.

Andrusiani, M., recovery of alcohol in bakeries, (P.), B., 766.

Andrussov, L., comparison of the catalytic oxidation of hydrocyanic acid and ammonia, A., 582.

catalytic oxidation of ammonia, B., 318.

Anflogoff, N. L. See Partington, J. R.

Anger, G., producing bleaching powder by the Backman process, B., 873.

Angelescu, E., equilibrium between two liquid phases. II. System, aniline-acid-water. III. System, *o*-toluidine-acetic acid-water, A., 357.

Angell, A., anomalies of certain reactions, A., 914.

relations between azoxy-compounds and diazo-hydrates, A., 947.

Angerer, E. von, dark-room infection by red-sensitising agents, B., 142.

Angerer, E. von, and Joos, G., absorption of linearly and circularly polarised light, A., 1080.

Angern, O. See Pfeiffer, P.

Angerstein, J. See Jenny, A.

Angil, J. See Vignau, P. T.

Anglo-Canadian Mining and Refining Co., Ltd. See Hybinette, N. V.

Anhydrous Metallic Chlorides Corporation. See Wohlers, F. T.

"Anilrust" See Rodionov, V. M.

Ankeny, C. W., and Dorr Co., multiple-deck pulp thickener, (P.), B., 425.

Anna, E. See Jendrassik, L.

Annett, H. E., and Aylor, A. R. P., silage experiments at Nagpur, B., 766.

Annett, H. E., and Böse, M. N., oil content of the seeds of the opium poppy, B., 66.

ash constituents of Indian opium, B., 74.

Annett, H. E., and Singh, H. D., influence of manures on the yield and morphine content of the latex of the opium poppy, B., 74.

Anosov, W., refractometry of binary liquid systems, A., 234.

Anschütz, L., distillation in a high vacuum with the aid of liquid air and silica gel, A., 1118.

Anschütz, R., occurrence of sparks during the crystallisation of carbon disulphide, A., 486.

Anson, M. L., and Mirsky, A. E., general properties of proteins, A., 189.

Antal, L. See Jendrassik, L.

Antiscale A.-G. zur Verwertung industrielle Patente, preventing the deposition of adherent crystals [scale] upon metal surfaces, (P.), B., 346.

Antiscale Co., Ltd., preventing formation of crystals and deposition of incrustations on metal surfaces, (P.), B., 952.

Antiscale Corporation. See Freeman, G. C.

Antiscale, Ltd. See Schenitzer, K.

Antisell, F. L., apparatus for concentrating liquids, (P.), B., 34.

producing electrolytic copper, (P.), B., 163.

Antonov, G. N., surface tension of solids, A., 671.

molecular changes in vapours and liquids, A., 786.

Antropoff, A. von, modified periodic system, A., 773.

applications of the modified periodic system to the graphical representation of the properties of elements and their compounds, A., 773.

physical and chemical properties of silicon and its position in the periodic classification, A., 1078.

Antropoff, W., and Sommer, W., space diagram of the three-component system NaOH-NaCl-H₂O, A., 1209.

Anziani, S. See Vavon, G.

Anzieglin, A., and Gulewitsch, W., [with Nordheim, K.], preparation of amino-acids by electro-reduction of oximino-esters, A., 1111.

Aold, K. See Welmarn, P. P. von.

Aoki, M., modification of Widmark's microchemical method for the determination of blood-alcohol, A., 1067.

Aoki, S. See Mitsukuri, S.

Aoyama, N. See Hagiwara, S.

Aoyama, S., ruthenium tetrachloride, A., 698.

Apablasa, C. C. See Apablasa, J. V.

Apablasa, J. V., filtering device, (P.), B., 176.

Apablasa, J. V., and Apablasa, C. C., filter for reclaiming crank-case oil and other mineral oils and animal fats, (P.), B., 176.

Apold, A., and Fleissner, H., roasting iron ore, (P.), B., 62.

roasting or calcining ores consisting substantially of alkaline earth carbonates or of iron carbonate, (P.), B., 710.

Appel, R., electrolytic separation of chromium, (P.), B., 933.

Appel, W. D., Brode, W. R., and Welch, I. M., standardisation of Agalma Black 10 B, B., 656.

Appleby, R. B. See Dover, M. V.

Appleton, W. H., and Helms, H. B., rate of absorption of sodium nitrate by oats and cotton when applied at different stages of plant growth, A., 871.

Appleyard, K. C., Bewick, P. W., Laycock, J. F., Portal, M. R., and Manners, W. E., separation of dry materials [scale], (P.), B., 780°.

Arakatsu, B., self-reversal lines of lead in explosion spectrum and the series relations between them, A., 875.

Araki, T., properties of various glues, B., 639.

Aram, O., refractory brick for furnace linings, (P.), B., 519.

Arbeit, P., and Manufactures des Glaces & Prod. Chim. de St. Gobain, Chauney & Cirey, furnace for glass manufacture, (P.), B., 747°.

Arbink, J. H. See Dorgelo, H. B.

Arbucide, H. B., and Thies, O. J., jun., variation of protein content of maize, IV., A., 439.

Arbusov, A. E., irreversible endothermic chemical processes, A., 805.

Archer, C. T. See Gregory, H.

Archer, R. S., Edwards, J. D., and Aluminum Co. of America, making castings of aluminium-silicon alloys, (P.), B., 246°.

Archer, R. S. See also Jeffries, Z., and Johnston, R. L.

Archibald, J. G. See Lindsey, J. B.

Ardash, E. G. R., and Williams, J. G., phenylhydrazine and factors affecting hydrazone formation, A., 162.

accurate general iodometric method for the determination of the carbonyl group in organic compounds, A., 189.

Ardern, E., treatment of sewage at Manchester, B., 460.

Arena, P. J., ozoniser, (P.), B., 164.

Arend, J. P., and Wagner, J., reactivity of coke, B., 261°.

Arenson, S. B., Roller, P. E., and Brown, D. J., reactive nature of aldehydes from the point of view of the apparent E.M.F., A., 687.

Argentographica, Ltd. See De Sperati, M.

Arinstein, B., proteolytic enzymes of the placenta, A., 757.

Aristowsky, W. M., conversion of insoluble compounds containing phosphorus and calcium into soluble, and their absorption in the alimentary canal, A., 318.

Arkel, A. E. *van*, crystal structure of magnesium fluoride and other compounds of this crystal-type, A., 400.
 distinguishing between ionic and atomic lattice by means of the X-ray spectrograph, A., 780.
 crystal structure of manganese fluoride, lead iodide, and tungsten sulphide, A., 781.

Arkel, A. E. *van*, and De Boer, J. H., polarisation of the hydrogen atoms in organic compounds, A., 883.

Arkel, A. E. *van*, De Boer, J. H., and Naamlooze Venootschap Philips' Gloeilampenfabr., separating hafnium and zirconium, (P.), B., 745^o.

Arkhipovich, A. G., determination of ash in sugar manufacture by measuring the electrical conductivity of the aqueous solutions, B., 844.

Arlington Mills. See Christison, H.

Arloing, F., Sempe, and Chavanne, anti-microbial properties of various river and sea waters; bacteriophagic powers, B., 724.

Armour Fertilizer Works. See Meyers, H. H.

Armstrong, A. H. See Allison, S. K.

Armstrong, E. H., apparatus for treating acid phosphate [superphosphate], (P.), B., 558.

Armstrong, J. W., water filter design, B., 29.

Armstrong, P. A. E., and Ludlum Steel Co., article [chromium steel] resistant to food acids and process of making it, (P.), B., 495.

Arnaiol, L., electrolytic tank, (P.), B., 677.

Arndt, O., influence of acetonitrile on the electroendosmotic movement of liquids, A., 248.

Arndt, O., and Hafner, E. A., refraction of serum proteins and the individuality of albumin and globulin, A., 421.
 biochemistry of strontium; determination of strontium in the presence of calcium, A., 1068.

Arndt, O. See also Zetsche, F.

Arndt, T. See Tacke, B.

Arndt, C. H., salt requirements of *Lupinus albus*, B., 506.

Arndt, F., degradation of 2:2-dichlorothiophenol, A., 177.

Arndt, F., and Eistorf, B., 4:6-diphenylcoumarin [4:6-diphenyl-2-pyrone], A., 74.

Arndt, F., Kirsch, A., and Nachtwey, P., derivatives of thiosalicylic [o-thiobenzoic] acid and 3-oxythiophenol, A., 843.

Arndt, F., and Nachtwey, P., determination of perchloric acid in organic perchlorates, A., 489, 701.
 isolation of homogeneous pyridine through the perchlorate; pyridine, ammonia, and indicators; pyridinium perchlorate as acidimetric standard, A., 525.

addition of halogen to dl-tyrosyl ketone, A., 827.

Arndt, H. See Bauer, O.

Arndt, K., and Ploetz, G., [electrical] conductivity and viscosity of pure sodium and potassium hydroxides, A., 801.

Arnemann, P. T., melting and refining of readily oxidisable metals (copper, lead, tin, zinc, or aluminium) and their alloys, (P.), B., 833.

Arnold, C. W. B. See Hind, H. L.

Arnold, L., significance of bacteriophage in surface water, B., 409.

Arnone, M. A., and Arnone, V., carbons or electrodes for the formation of ultraviolet rays for therapeutical purposes, (P.), B., 371.

Arnone, V. See Arnone, M. A.

Arnot, J. M., apparatus for draining water from steam-heated rotary cylinders and the like, (P.), B., 114^o.

Arnould, J., refractory hydraulic cement, B., 363.

Arnovyevitch, M. See Ambard, L.

Arny, H. V., evolution of synthetic medicinal chemicals, B., 850^o.

Arrhenius, S., kinetics of lipase reactions, A., 133.

Arsdale, G. D. *van*, leaching mixed copper ores with ferric sulphate, B., 59.

Arsdale, G. D. *van*, Aldrich, H. W., Scott, W. G., and Inspiration Consolidated Copper Co., recovery of values from ores, (P.), B., 618.

Arsemen, W. C., gel structure, A., 473.
 settling and packing of mixed paints, B., 287.

Arsenjeva, A., photo-electric conductivity in rock-salt, A., 782.

Arthur, E. P., chemical composition of window glass, B., 488.

Artificial Coal Co. (Harmon Process), Ltd., and Hamon, L. le W., manufacture of carbon for decolorising and deodorising, (P.), B., 351.

Artom, C., variations of phosphorus-containing lipids during liver autolysis, A., 201.

Arx, J. *van*, pictures by the dye-transfer process, (P.), B., 997.

Asagoe, K., and Kumagai, N., reflecting powers of some metal sulphides, A., 892.

Ashahina, T. See Shibata, Y.

Ashahina, Y., and Tsukamoto, T., essential oil of *Daucus carota*, L. I., B., 339.

Asbeck, C., producing a high-grade mixed gas, (P.), B., 477.

Asbury, W. C. See Clark, G. L.

Aschan, O., determination of camphor, B., 768.

Ascherl, A. See Schmidt, Erich.

Aschroft, E. A., apparatus for electrolyzing fused salts of metals and recovering the metals and acid radicals, (P.), B., 164^o.
 (treatment of lead-zinc sulphur ores, mattes, etc., (P.), B., 1018^o.

Aschroft, G. V. See Renshaw, A.

Ascherl, L., and Calvo-Criado, F., physiology of glands, LXXXIII. Formation of carbohydrates from fat, A., 198.

Ascherl, L., and Uchida, S., physiology of glands, LXXXVIII. Effect of the thyroid gland on the growth-promoting properties of blood; detection of growth factors in blood, A., 206.

Ashley, T. J. See Aldridge, J. G. W.

Ashworth, F. See Burkhardt, G. N.

Asian Petroleum Co., Ltd., and Kewley, J., fuel for use in internal-combustion engines, (P.), B., 1004.

Askania-Werke A.-G., gas-fired furnaces, (P.), B., 178^o, 224^o.

Askenasy, P. [with Bring, J.], influence of added substances on mode of fixation of nitrogen by mixtures of barium carbonate and carbon, B., 978.

Askenasy, P., and El'ld, E., manufacture of arachic pentoxide, (P.), B., 823.

Askenasy, P. See also Obersohn, A.

Askinasi, D. L. See Bobko, E. W.

Asphalt Cold Mix, Ltd., and Levy, F., bituminous emulsions, (P.), B., 363.

Asphalt Cold Mix, Ltd. See also Hay, G. S.

Asplundh, E. T., and Pittsburgh Plate Glass Co., increasing the density of finely-divided material [soda ash], (P.), B., 708.

Asselin. See Random, L.

Asmann, P., aluminium-lithium alloys, B., 241.
 significance of silicon in the ageing of aluminium alloys containing lithium or magnesium, B., 831.

Assmann, P. See also Agde, G.

Astachov, K. See Vosnesenski, S.

Astanin, P., experimental calcomil, A., 425.

Astbury, W. T., structure and isotrimorphism of the tervalent metallic acetyl-acetones, A., 996.

Astbury, W. T. See also Morgan, G. T.

Astengo, R. See Ageno-Valla, E.

Aston, F. W., isotopes of sulphur, A., 771.

Aston, J. G. See Stewart, T. D.

Astrom, A. See Salt, H.

Attack, F. W., sulphurising organic compounds [for production of sulphur dyestuffs], (P.), B., 234^o.

Atchley, D. W., and Nichols, E. G., influence of protein concentration on conductivity of human blood-serum, A., 86.

Atkinson, E. J., and Southwestern Condenser Co., condensing system, (P.), B., 857.

Ateliers de Construction Cerlikon, manufacture of refractory material, (P.), B., 363.

Aten, A. H. W., and Dalsen, J. van, elimination of liquid potentials, A., 361.

Aten, A. H. W., and Ginneken, P. J. H. van, hydrogen electrode for flowing liquids, A., 38^o.

Atabasca Oil Products, Ltd. See Clarke, N. S.

Athanasiu, J. A., use of water-alcohol mixtures in the electrometric study of precipitation reactions, A., 376.
 hydrolysis in the systems TiR_4 - H_2O , A., 580.
 electrometric precipitation titrations, A., 929.

Atkin, W. R. See McCandlish, D.

Atkins, W. R. G., phosphate content of sea water in relation to the growth of the algal plankton, III, A., 1021.

Atkins, W. R. G., and Harvey, H. W., variation with depth of certain salts utilised in plant growth in the sea, A., 42.

Atkins, W. R. G., and Pandin, C. F. A., buffer mixture for the alkaline range of hydrogen-ion concentration determinations, A., 374.

Atkinson, F. C., and Garland, J. W., Inc., destructive distillation [of maize cobs, etc.], (P.), B., 396.

Atkinson, H., volumetric determination of sulphates by means of barium chloride and potassium stearate, A., 38, 261.
 titration of ammonium sulphate by the stearate method, B., 358.

Atkinson, H., and Heilbron, L. M., styrylpypyrryl salts. VI. Styryl derivatives of 9-methylxanthylum chloride and 3:6-dihydroxy-9-methylxanthylum chloride, A., 620.

Atkinson, H., J., miscibility tests in the detection of adulterated butter, B., 895.

Atkinson, L. B., quantitative determination of selected gases in atmospheres, (P.), B., 429.

Atlantic Dyestuff Co., and Burrage, A. C., jun., vulcanisation of rubber, (P.), B., 433.

Atlantic Refining Co. See Johansen, E. M., and Lewis, J. W.

Atlas Portland Cement Co. See Croll, A. G.

Atlas Powder Co. See Pratt, C. D.

Atmospheric Nitrogen Corporation. See Dely, J. P.

Ato, S., and Wada, I., analysis of the alkali group, A., 929.

Ato, S. See also Wada, I.

Atsuki, K., action of highly concentrated hydrochloric acid on cellulose, R., S. cellulose fibre and tissue paper as materials for celluloid, B., 46.
 bond-elongation curves and lustre of artificial silk, B., 911.

Atsuki, K., and Ishihara, M., sulphite tissue paper as material for nitro-cellulose for celluloid, B., 738.

Atsuki, K., and Minaki, T., action of concentrated sulphuric acid on cellulose and extraction of cellulose from wood, B., 266.

Atsuki, K., and Tomoda, Y., Japanese seaweeds. I. Chemical constituents of *Laminaria*, A., 1280.

Aubel, E., intermediate formation of methylglyoxal in degradation of dextrose by micro-organisms, A., 1277.

Aubel, E., and Genevois, L., reduction of thionline by various organic substances in absence of air and light, A., 963.

Aubel, E., Genevois, L., and Salabartan, J., cultivation of yeast in a synthetic medium, A., 641.

Aubert, M., and Ambre, E., extension of method of critical temperatures of solution to analysis of petrols, B., 260.

Aubertot, V. See Loepke, M., and Mougeot, A.

Aubin, P. A. See Rushton, W.

Aubreé, E. See Aubert, M.

Aubry, J. B. G., preparation of emulsifying agents from castor oil, (P.), B., 286.

Auchter, E. C., and Harley, C. P., effect of various lengths of day on the development and composition of some horticultural plants, A., 1280.

Audibert, E., conditions underlying the caking of coal, B., 225.
 transient fusion of coal, B., 569.

Audibert, J. F. A., treatment of the seed of the carob tree [to extract the gum], (P.), B., 764^o.

Audibert, W. A., treatment of wood, (P.), B., 477.

Audubert, R., action of visible light on electrodes, A., 104.

Audubert, R., and Quintin, (Mme.) M., mechanism of the adsorption of ions, A., 347.

Auer, L., drying of fatty acids, B., 450.
 frosting of tung oil films; the tung oil phenomenon, B., 501.
 polymerisation in the drying process and thickening of fatty oils, B., 888.

Auerbach, J., comparison of "wetting-out" agents [for textile processes], B., 705.

Auerbach, J. See also Kind, W.

Auerbach, J., unreliability of the Tortelli-Jallé reaction [for marine-animal oils], B., 923.

Auerbach, R., diffusion analysis, A., 122.
 selenium and tellurium dispersoid solutions with varying particle size, A., 574.
 solutions of sulphur, selenium, and tellurium in pyrosulphuric acid, A., 791.

Auerbach, R. See also Ostwald, Wolfgang.

Aufenast, F., and Terry, H., [non-existence of the suboxides of lead and thallium, A., 811.

Auger, M., enamelling metal articles, (P.), B., 918.

Auger, P., production of fluorescence in the region of X-rays, A., 551, 659.
 collisional β -radiation (3-rays), A., 553.
 compound photo-electric effect, A., 1188.

Auger, *P.*, and Perrin, *F.*, distribution in space of the directions of emission of photo-electrons, *A.*, 876.

Auger, *R. A.*, process for enamelling metal articles, *(P.)*, *B.*, 586.

Auger, *V.*, and Longinescu, *J. N.*, oranges and reds of uranium, *A.*, 588.

Augstberger, *A.*, buffers, *II.* Titre of buffer solutions, *A.*, 1115.

Auguste, *C.*, and Auguste, *S.*, nephelometric micro-determination of carbamide; determination of carbamide content of blood, *A.*, 648.

Auguste, *S.* See Auguste, *C.*

Augustine, *C. E.*, Neil, *J.*, and Myler, *W. M.*, *jun.*, value of bituminous coal and coke for generating steam in a low-pressure cast-iron boiler, *B.*, 347.

Auguston, *A. M.* See Hägglund, *E.*

Auld, *S. J. M.*, and Dunstan, *A. E.*, development of a liquid-phase cracking process, *B.*, 811.

Aupperle, *J. A.* See Beck, *W. J.*

Aurig, *M.*, and Brückmayer, *G.*, rotary gas washer, absorption apparatus, etc.; disintegrators in gas washers, absorption apparatus, etc., *(P.)*, *B.*, 862.

Aurousseau, *M.* See Washington, *H. S.*

Auspitzer, *O.*, comminuting solids and forming colloidal solutions, *(P.)*, *B.*, 424.

Austen, *W.*, rapid method of determining the iodine value with iodine and alcohol, *B.*, 417.

Austerweil, *G.*, hydration of naphthene, *A.*, 619.

preparation of thymol from 2-cyandine [o-aminocymene], *(P.)*, *B.*, 109°.

naphthene as a technical raw material, *B.*, 253.

separation of naphthene from pinene-naphthene mixtures, *(P.)*, *B.*, 900.

Austerweil, *G.*, and Pefallit, *L.*, retting of flax, hemp, and other textile plants, *(P.)*, *B.*, 739°.

separation of terpene mixtures or of difficultly separable terpene derivatives, *(P.)*, *B.*, 900.

Austin, *A. C.*, and Ohio Brass Co., preparing clay or body composition for ceramic articles, *(P.)*, *B.*, 241.

preparing material for ceramic articles, *(P.)*, *B.*, 709.

Austin, *H. E.*, and American Creosoting Co., mixing, disintegrating, or homogenising machine, *(P.)*, *B.*, 618.

Austin, *H. E.* See also Piper, *S. H.*

Austin, *J. H.*, Stadie, *W. C.*, and Robinson, *H. W.*, relation of true p_{H_2} of blood-serum or plasma to that observed colorimetrically, *A.*, 422.

Austin, *J. H.*, Sunderman, *F. W.*, and Camack, *J. G.*, osmotic pressure of haemoglobin and of base bound by haemoglobin, *A.*, 1267.

Austin, *J. H.* See also Stadie, *W. C.*

Austin, *R. H.* See Spurway, *C. H.*

Austin, *W. C.* See Boyd, *T. E.*

Austin, *W. E.* See Stein, *H.*

Austro-American Magnesite Co. (Oesterr.-Amer. Magnesitges.), manufacture of magnesia from crystalline magnesites for the production of Sord cement, *(P.)*, *B.*, 364.

Autogen Gasaccumulator A.-G., manufacture of porous masses for storing gases, *(P.)*, *B.*, 521.

Autogen Gasaccumulator A.-G., and Stell, *H.*, increasing the safety and activity of porous masses for the storage of acetylene, *(P.)*, *B.*, 430.

Autrey, *A. R.*, decolorising and refining gums and resins products of coniferous pine trees, *(P.)*, *B.*, 68.

Auwers, *K. von*, refractometry, *A.*, 456.

Auwers, *K. von*, and Allard, *H. G.*, 1 : 2-methylacetyl derivatives of indazole, *A.*, 306.

indazyl-fatty acids, *A.*, 307.

Auwers, *K. von*, Bundesmann, *H.*, and Wieners, *F.*, migration of the methyl group in Fries' transformation, *A.*, 608.

Auwers, *K. von*, and Ernst, *W.*, spectro-chemistry of compounds containing nitrogen, *II.*, *A.*, 994.

Auwers, *K. von*, and Frese, *E.*, 7-amino-5-methylindazole and 7(4)-amino-2-methylbenzimidazoles, *A.*, 529.

Auwers, *K. von*, and Hollmann, *H.*, isomeric relationships in the pyrazole series. *VI.* Alkyl derivatives of 5-methylpyrazole-3-carboxylic acid and of 3(5)-methylpyrazole, *A.*, 623.

isomeric relationships in the pyrazole series. *IX.* 1 : 3- and 1 : 5-Dialkyl-pyrazoles and related compounds, *A.*, 847.

Auwers, *K. von*, and Kraul, *R.*, spectro-chemistry of compounds containing nitrogen, *A.*, 109.

Auwers, *K. von*, and Mauss, *H.*, isomeric relationships in the pyrazole series. *VII.* Diphenylmethylpyrazole and certain other pyrazole derivatives, *A.*, 624.

Auwers, *K. von*, and Ströder, *P.*, indazole derivatives, *A.*, 628.

Auwers, *K. von*, and Stuhmann, *H.*, isomeric relationships in the pyrazole series. *VIII.* 5(3)-Phenyl-3(5)-methylpyrazole, *A.*, 741.

Auwers, *K. von*, and Wieners, *F.*, *s*- and *as*-hemimellithenol, *A.*, 283.

Auwers, *O. von*, influence of grain size on the magnetic properties of silicon-iron sheet, *B.*, 15, 324.

Avenatti-Bassi, *C.* See Schiapparelli, *C.*

Averill, *H. P.*, and King, *C. G.*, phytin content of foodstuffs, *B.*, 381.

Averill, *W. C.*, *jun.*, apparatus for separating hydrocarbons, *(P.)*, *B.*, 352.

process for separating hydrocarbons, *(P.)*, *B.*, 431.

Aversano, Jalouste, and Manrin, development of castor-oil plants under the radioactive influence of thorium-X, *A.*, 647.

Avery, *M. D.*, purifying liquids [water], *(P.)*, *B.*, 614°.

Avery, *O. T.* See Heidelberger, *M.*

Awad, *Y.* See Fleury, *P.*

Awbery, *J. H.*, and Griffiths, *E.*, latent heat of fusion of some metals, *A.*, 1087.

Acock, *G. A.* See British Celanese, Ltd.

Awe, *W.* See Feist, *K.*

Awerbuch, *A.* See Centnerswer, *M.*

Axelsen, *P. T.*, and Norsk Hydro-Elektrisk Kvaelfstofaktieselskab, treating fertilisers, *(P.)*, *B.*, 139°.

Aylesworth, *M. B.* See Evans, *W. V.*

Ayres, *A. U.* See Jones, *L. D.*, and Sharples Specialty Co.

Ayres, *E. E.*, *jun.*, and Sharples Specialty Co., resolving emulsions, *(P.)*, *B.*, 178°.

Ayvar, *P. R.* See Kang, *D. D.*, and Sudborough, *J. J.*

Azami, *K.*, and Sengoku, *S.*, constituents of bamboo, *B.*, 8.

Azami, *K.* See also Kita, *G.*

Azbe, *V. J.*, factors governing lime-kiln capacity and fuel economy, *B.*, 154.

Azuma, *R.*, and Kameyama, *N.*, potential difference and equilibrium across a semipermeable colloidion membrane in the case of sodium chloride and Congo-red, *A.*, 129.

Azzalin, *E.*, determination of copper by Feigi's method, *A.*, 140.

preparation of 1-thiobenzthiazole, *A.*, 310.

Azzopardi, *G.*, filtering apparatus, *(P.)*, *B.*, 866.

Baade, *K.*, dependence of poisonous action on the physico-chemical condition of the cell, *A.*, 863.

Baas-Becking, *L. C. M.* See Field, *J.*

Babasianian, *V. S.*, and Billinger, *R. D.*, modified fusion pot, *B.*, 471.

Babb, *J. E.*, and Waverly Oil Works Co., explosive fuel mixture; fuel mixture for internal combustion engines, *(P.)*, *B.*, 621.

Babcock, *F. J.*, and Stebbins Engineering & Manuf. Co., apparatus for making sulphite liquor, *(P.)*, *B.*, 401.

Babcock & Wilcox, Ltd., and Spyer, *A.*, combined evaporator and feed heating systems, *(P.)*, *B.*, 145°.

Babel, *A.* See Weinland, *R.*

Bablik, *H.*, pickling iron with hydrochloric and sulphuric acids, *B.*, 443.

Babuglia, *R. T.* See Vignau, *P. T.*

Bach, determination of nitrates in sewage sludge, *B.*, 806.

Bach, *A.*, and Kultjungin, *A.*, peroxidase function of oxyhaemoglobin, *A.*, 432.

Bach, *A.*, and Nikolajev, *K.*, are oxygen transportases and hydrogen transportases identical?, *A.*, 642.

Bach, *H.*, further decomposition of partially decomposed sewage sludge, *(P.)*, *B.*, 470.

biological purification of effluents contaminated with phenols, *(P.)*, *B.*, 646.

biological purification of effluents contaminated with organic matter, and containing acids; effluents from breweries, distilleries, etc., *(P.)*, *B.*, 646.

Bach, *M.*, decomposition of farmyard manure in soil and its utilisation by plants, *B.*, 640.

Bach, *R.*, process for working up animal fibres, hairy skins, or hair, *(P.)*, *B.*, 314.

Bacharach, *A. L.* See Jephcott, *H.*

Bachillov, *I.*, separation of barium and radium salts, *(P.)*, *B.*, 538.

enrichment of ores containing limestone, *(P.)*, *B.*, 885.

Bachler, *P. R.*, treatment of molasses with zeolites in applying the Steffens process, *B.*, 336.

Bachman, *P. W.* See Patrick, *W. A.*

Bachmann, *W.*, and Brieger, *C.*, improvement of the lubricating efficiency of oil by graphite, and its study by the aid of measurements of the heat of wetting, *B.*, 777.

Bachmann, *W.* See also Buchner, *M.*

Bachrach, *E.*, toxic effects of potassium chloride on the lactic acid bacillus at different temperatures, *A.*, 643.

Back, *E.*, experimental basis of the Zeeman effect, *A.*, 103.

Zeeman effect of the lead spectrum, *A.*, 767.

Backer, *C. B.*, producing an adherent coating of an oxygenous magnesium compound [on magnesium or its alloys], *(P.)*, *B.*, 498°.

Backer, *H. J.*, bromosulphoacetic acid, *A.*, 49.

Backer, *H. J.*, and Bloeman, *A.*, β -sulphobutyric acid, *A.*, 271.

active components of γ - β -sulphobutyric acid, *A.*, 271.

Backer, *H. J.*, and Meijer, *W.*, derivatives of 3-methyl-5-pyrazolone, *A.*, 305.

formation and nitration of alkylxypyrazoles, *A.*, 741.

Backer, *H. J.*, and Mulder, *C. H. K.*, hydroxy-derivatives of 1 : 2 : 4-triazole, *A.*, 182.

Backhouse, *T. N.*, and Oliver, *H.*, composition for the manufacture of bricks, tiles, artificial stone, etc., *(P.)*, *B.*, 1015.

Backhurst, *I.*, obliquity corrections in radium determination, *A.*, 771.

Bacon, *F. S.*, and Bacon, *M. A.*, rotating retort, *(P.)*, *B.*, 473°.

Bacon, *M. A.* See Bacon, *F. S.*

Bacon, *N.* See Renshaw, *R. R.*

Bacon, *R. F.*, Kobbé, *W. H.*, Bascom, *P. H.*, and Texas Gulf Sulphur Co., sulphur-containing article, *(P.)*, *B.*, 130.

Bacot, *A. M.* See Hendricks, *S. B.*

Baddiley, *J. Hill*, Riley, *A.*, and British Dyestuffs Corporation, Ltd., azo-colouring matter dyeing wool fast to milling, *(P.)*, *B.*, 910°.

Baddiley, *J.*, Tatum, *W. W.*, and British Dyestuffs Corporation, Ltd., dyestuffs of the anthraquinone series, *(P.)*, *B.*, 312°.

Baddiley, *J.* See also British Dyestuffs Corporation, Ltd.

Bader, See Pastureau, *J.*

Bader, *H.* See Gaisser, *F. C.*

Bader, *M.* See Durand & Huguenin S.A.

Bader & Salau, See Salau, *H.*

Bader, *C. H.*, and Sale, *J. W.*, determination of the acidity of highly-coloured fruit-type products, *B.*, 895.

Bader, *R. M.* See Tolman, *R. C.*

Badger Fire Extinguisher Co. See Esselen, *G. J.*, *jun.*

Badische Anilin- & Soda-Fabrik, desulphurising spent absorption charcoal, *(P.)*, *B.*, 5.

manufacture of vat [anthraquinone] colouring matters, *(P.)*, *B.*, 44.

preparing saturated aldehydes from unsaturated aldehydes, *(P.)*, *B.*, 108.

manufacture of vat dyestuffs from benzanthrone, *(P.)*, *B.*, 148, 266°, 626°.

production of stable bicarbonate of ammonium, *(P.)*, *B.*, 155.

manufacture of carbonyl compounds [iron carbonyl], *(P.)*, *B.*, 191, 487, 1013.

manufacture of valuable organic compounds, *(P.)*, *B.*, 202.

cooling coke, *(P.)*, *B.*, 229.

manufacture of azo-dyestuffs, *(P.)*, *B.*, 233, 736°.

carrying out circuit reactions [ammonia synthesis] under very high pressures, *(P.)*, *B.*, 236.

production of solid urea from solutions, *(P.)*, *B.*, 251.

calcium nitrate fertiliser, *(P.)*, *B.*, 293.

iron carbonyl mixtures [for use as motor fuel], *(P.)*, *B.*, 309.

manufacture of dyes of the dibenzanthrone series, *(P.)*, *B.*, 311.

production of coloured cellulose plastics and solutions, *(P.)*, *B.*, 315.

apparatus for the manufacture of hypochlorite solutions, *(P.)*, *B.*, 322.

purification of gases [from iron carbonyl], *(P.)*, *B.*, 351.

production of colouring matter pastes [containing vat dyes], *(P.)*, *B.*, 355.

manufacture of solid calcium nitrates, *(P.)*, *B.*, 379°, 788.

liquefaction of gases, *(P.)*, *B.*, 392.

manufacture of pure urea [carbamide], *(P.)*, *B.*, 420.

refining of hydrocarbons, *(P.)*, *B.*, 432.

preparation of tanning materials, *(P.)*, *B.*, 455.

arsenic preparations; [Insecticides and fungicides], *(P.)*, *B.*, 458.

burners for liquid fuels, *(P.)*, *B.*, 527°.

azo-dyes [for cellulose acetate], *(P.)*, *B.*, 536.

dyes and dyeing process, *(P.)*, *B.*, 536.

vat dyes of the naphthanthraquinone series, *(P.)*, *B.*, 577.

Badische Anilin- & Soda-Fabrik, treatment of tar water, (P.), B., 624°. manufacture of alkyl esters of formic acid, (P.), B., 646°. manufacture of yellow azo-dyes, (P.), B., 656°. manufacture of anthraquinone derivatives, (P.), B., 658°. manufacture of colouring matters and dyeings therewith, (P.), B., 702°. manufacture of vat colouring matters, (P.), B., 703°. synthesis of organic compounds [from carbon monoxide], (P.), B., 721°. manufacture of organic compounds [by catalytic reduction], (P.), B., 733°. dyeing cellulose esters, (P.), B., 741°. manufacture of oxygenated organic compounds, (P.), B., 769°. production of formamide and hydrocyanic acid whether free or in the form of ammonium cyanide, (P.), B., 770°. removal of vapours or gases from moist gaseous mixtures, (P.), B., 776°. manufacture of condensation products and dyestuffs of the benzanthrone series [dibenzanthrones], (P.), B., 780°. dyeing fast shades on wool, (P.), B., 785°. heating the blast for furnaces and producers, (P.), B., 857°. removal of iron from materials, (P.), B., 883°. production of dry liquefied gases, (P.), B., 904°. manufacture of finely divided metal oxides and silica, (P.), B., 979°. oxidation of fats, oils, waxes, resins, (P.), B., 987°. dyeing of cellulose materials, (P.), B., 1011°.

Badische Anilin- & Soda-Fabrik, and Allics, R., process for tanning hides, (P.), B., 456°.

Badische Anilin- & Soda-Fabrik, Beck, F., and Balz, O., manufacture of pure, concentrated nitric acid, (P.), B., 155°.

Badische Anilin- & Soda-Fabrik, Böttcher, A., and Kuss, E., preparation of formaldehyde from methyl alcohol, (P.), B., 463°.

Badische Anilin- & Soda-Fabrik, Brotz, J., and Klein, K., manufacture of arsenic acid and arsenates, (P.), B., 320°.

Badische Anilin- & Soda-Fabrik, and Bub, L., lead carbonate, (P.), B., 237°.

Badische Anilin- & Soda-Fabrik, and Egner, M., tanning materials, (P.), B., 456°.

Badische Anilin- & Soda-Fabrik, Eyer, K., and Griesbach, R., manufacturing solid calcium nitrate, (P.), B., 139°.

Badische Anilin- & Soda-Fabrik, Fahrenhorst, J., Griesbach, R., and Sander, F., manufacture of strontium carbonate, (P.), B., 192°.

Badische Anilin- & Soda-Fabrik, and Farbwerke vorm. Meister, Lucius, & Brüning, manufacture of intermediates [mercaptans, sulphides, and disulphides] of the benzanthrone series, (P.), B., 867°.

Badische Anilin- & Soda-Fabrik, and Fick, R., production of formamide, (P.), B., 514°.

Badische Anilin- & Soda-Fabrik, and Frankenburger, W., light-sensitive preparations for photographic printing, (P.), B., 220°.

Badische Anilin- & Soda-Fabrik, and Friederici, L., purification of sulphur, (P.), B., 238°.

Badische Anilin- & Soda-Fabrik, Gaus, W., and Lappe, F., operating explosion motors, (P.), B., 701°.

Badische Anilin- & Soda-Fabrik, and Günther, F., compound for dyeing, (P.), B., 271°. azo-dyestuffs, (P.), B., 432°.

Badische Anilin- & Soda-Fabrik, Günther, F., and Lange, F., solid stable diazo-compounds, (P.), B., 234°. dyeing cellulose esters, (P.), B., 317°.

Badische Anilin- & Soda-Fabrik, Immerheiser, K., and Neubauer, K., process for colouring wood, (P.), B., 587°.

Badische Anilin- & Soda-Fabrik, Immerheiser, K., Neubauer, K., and Scharf, E., manufacture of coloured cellulose plastics and solutions, (P.), B., 661°.

Badische Anilin- & Soda-Fabrik, Immerheiser, K., and Wolff, Hugo, tanning composition, (P.), B., 505°.

Badische Anilin- & Soda-Fabrik, Just, R., Wilke, K., and Nawiasky, P., black [dibenzanthrone] vat dyestuff composition, (P.), B., 480°.

Badische Anilin- & Soda-Fabrik, and Kämmerer, H., azo-dyes containing chromium, (P.), B., 233°.

Badische Anilin- & Soda-Fabrik, and Krzikalla, H., developing salts, (P.), B., 318°.

Badische Anilin- & Soda-Fabrik, Krzikalla, H., Kämmerer, H., and Niesslein, J., producing fast dyeings on wool, (P.), B., 536°.

Badische Anilin- & Soda-Fabrik, Lüttringhaus, A., Neresheimer, H., and Emmer, H., process of manufacturing [benzanthrone] vat dyes, (P.), B., 434°.

Badische Anilin & Soda-Fabrik, Lüttringhaus, A., Wolff, Hugo, and Neresheimer, H., manufacture of benzanthrone derivatives, (P.), B., 86°.

Badische Anilin & Soda-Fabrik, Lüttringhaus, A., and Wolfram, A., vat colouring matter, (P.), B., 737°.

Badische Anilin- & Soda-Fabrik, and Meiser, W., manufacture of carbamide, (P.), B., 613°.

Badische Anilin- & Soda-Fabrik, Meyer, K. H., and Schütte, H., process for tanning hides, (P.), B., 455°.

Badische Anilin- & Soda-Fabrik, and Mittasch, A., production of finely divided iron oxide, (P.), B., 321°.

Badische Anilin- & Soda-Fabrik, Mittasch, A., and Balz, O., process for tanning hides, (P.), B., 455°.

Badische Anilin- & Soda-Fabrik, Mittasch, A., and Jannek, J., material for absorbing gases, liquids, and solids, and for effecting catalytic reactions, (P.), B., 33°.

Badische Anilin- & Soda-Fabrik, Mittasch, A., and Michael, W., effecting catalytic reactions, particularly in catalytically producing hydrocyanic acid, (P.), B., 483°.

Badische Anilin- & Soda-Fabrik, Mittasch, A., and Pier, M., synthetic manufacture of methanol [methyl alcohol], (P.), B., 218°.

Badische Anilin- & Soda-Fabrik, Nawiasky, P., and Krauch, E., manufacture of grey to black vat [dibenzanthrone] dyes, (P.), B., 677°.

Badische Anilin- & Soda-Fabrik, and Neresheimer, H., production of anthraquinone derivatives containing nitrogen [isoaxazolones], (P.), B., 149°. manufacture of vat [dibenzanthrone] dyestuffs, (P.), B., 480°, 659°.

Badische Anilin- & Soda-Fabrik, and Pfeiderer, G., electrolytic cells, (P.), B., 246°.

Badische Anilin- & Soda-Fabrik, Pfützner, G., and Flieg, O., retting flax and similar vegetable fibres, (P.), B., 152°.

Badische Anilin- & Soda-Fabrik, and Ramstetter, H., preparation of condensation products [artificial resins], (P.), B., 99°.

[resinous] substances for the manufacture of optical apparatus, (P.), B., 203°.

Badische Anilin- & Soda-Fabrik, and Schmidt, Otto, artificial tanning substance, B., 600°.

Badische Anilin- & Soda-Fabrik, Schmidt, Otto, and Scydel, F., preparation of phenols, (P.), B., 433°.

Badische Anilin- & Soda-Fabrik, and Schneider, C., treating tar water, (P.), B., 478°.

Badische Anilin- & Soda-Fabrik, and Theobald, E., colouring-matter paste, (P.), B., 628°.

Badische Anilin- & Soda-Fabrik, Wietzel, G., and Dierksen, J., obtaining halogenated hydrocarbons, (P.), B., 464°.

Badische Anilin- & Soda-Fabrik, Wietzel, G., and Wietzel, R., synthesising higher molecular organic compounds containing oxygen, (P.), B., 512°.

Badische Anilin- & Soda-Fabrik, and Wietzel, H., manufacture of a stable mixed fertiliser containing calcium nitrate, (P.), B., 336°.

Badische Anilin- & Soda-Fabrik, and Wietzel, R., manufacture of formamide, (P.), B., 219°. production of alkyl esters [formates], (P.), B., 462°.

Badische Anilin- & Soda-Fabrik, Wild, W., and Eyer, K., making a calcium nitrate fertiliser, (P.), B., 458°.

Badische Anilin- & Soda-Fabrik, and Winkler, F., obtaining pure sulphur, (P.), B., 238°. manufacturing active carbon, (P.), B., 479°.

Badoche, M. See Mourau, C.

Badoche, M. S., and Payne, H. S., basic dyes as flocculating agents for approximate quantitative determination of colloids in sugar-house liquors, B., 507°.

Baechler, Kiser & Co., vertical drying and dehydrating apparatus, (P.), B., 331°.

Bäck, R. See Virtanen, A. I.

Bäcklin, E., X-ray spectra and chemical combination, A., 987°.

Bäckström, H. See Benedictus, C.

Bäckström, H. L. J., thermal dissociation of calcium and magnesium carbonates, A., 793°.

Bähr, A., manufacture of nitrates from nitrous gases, (P.), B., 487°.

Baake, M., steels, (P.), B., 329°.

Baekeland, L. H., Gottschell, A. H., and Bakelite Corporation, preparation of resinous bodies derived from acetaldehyde, (P.), B., 956°.

Bärlund, B. See Virtanen, A. I.

Bätz, G. See Tammann, G.

Bäuerlein, K. See Helferich, B.

Bazzini, G., and Chiesa, L., deliming heavy hides, B., 69°.

Bagley, G. D., and Electro-Metallurgical Co., uniting metals [with copper or its alloys], (P.), B., 548°.

Baglin, C. A., regenerative coke ovens, (P.), B., 1004°.

Bagwill, W. L., cracking still for mineral oils, (P.), B., 41°.

Bahr, T. See Broche, H.

Balla, J. C., analysis of lime, B., 537°.

Bailey, K. C., action of radon on mixtures containing ammonia and an oxide of carbon, A., 254°. determination of aldehyde in alcoholic liquors by Schiff's reagent, B., 562°.

Bailey, L. H., See Hertwig, R.

Bailey, R. W., softening of strain-hardened metals and its relation to creep, B., 366, 792°.

Bailey, R. W., and Metropolitan-Vickers Electrical Co., Ltd., removing suspended matter from gases, (P.), B., 648°.

Bailey, T. L., interaction of oxides of nitrogen with arsoucious acid and with sulphurous acid in presence of sulphuric acid, B., 628°.

Bailleux, E., complete analysis of fluor spar, B., 1012°.

Baily, M. H. See Gimberg, L. D.

Baily, O., and Gaumé, J., synthesis and hydrolysis of a glycerolmonophosphoric ester: constitution of orthophosphoric acid, A., 936, 1225°.

Baily, A. H., and Kirby, J. N., manufacture of soaps, (P.), B., 954°.

Bain, E. C., alloys of iron and chromium, B., 828°.

Bain, E. C. See also Grossman, M. A.

Bain, J. W., and Chute, G. M., effect of heat upon cellulose, B., 660°.

Bainbridge, H. W. See Trevan, J. W.

Bains, L. See Mills, W. H.

Baird, D. See Gordon, P. F.

Baird, W., and Wilson, F. J., action of hydrazines on semicarbazones, II., A., 1141°.

Baiardo, N., oximes of α -ketoformylhydroxamic acids. I., A., 1262°.

Bairgois, P., distillation of waste rubber, (P.), B., 761°.

Baisac, L., determination of the hydrogen-ion concentration in the cane sugar industry, B., 717°.

Bakelite Corporation. See Baekeland, L. H.

Bakelite Ges.m.b.H., obtaining phenol-aldehyde condensation products in a purified form, (P.), B., 924°.

Bakelite Ges.m.b.H. and Florenz, M., production of resinous products from crude anthracene and phenanthrene, (P.), B., 602°.

Bakelite Ges.m.b.H. and Hessen, R., manufacture of methyl alcohol and formaldehyde from methane, (P.), B., 565°.

Bakelite Ges.m.b.H. and Seebach, F., manufacture of pure resinous condensation products from phenols and aldehydes, (P.), B., 889°.

Baker, G. L., jelly strength of pectin jells, B., 213°.

Baker, H. B. See Riley, H. L.

Baker, J. C., chlorine in sewage and waste disposal, B., 389°.

Baker, J. C. See also Wallace & Tierman Co., Inc.

Baker, J. W., polycyclic structures in relation to their homocyclic unsaturated isomeric. VI. Reactions of isophorone, A., 529°.

Baker, J. W., and Ingold, C. K., alternating effect in carbon chains. IX. Directive influence of groups of form -OR' $\text{N}^{\text{+}}$ in aromatic substitution, A., 1131°.

Baker, T. See Peters, W. A., jun.

Baker, T. T., sensitivity of selenium cells, A., 706°. preparation of substances to be taken internally before radiographic examination, (P.), B., 108°.

Baker, T. T., and Balmain, W. A., relation between colour sensitiveness and the gradation given by a photographic plate, B., 612°.

Baker, T. T., and Davidson, L. F., new physical method for the examination of gelatin, B., 388°.

Baker, W., formation of chromones, A., 74°.

7-methoxy-3-(6'-bromohomopiperonyl)-2-methyl-1:4-benzopyrone, A., 732°.

Baker, W., and Robinson, R., isoflavone group. II. Synthesis of methylgenistein (methylprunetol) dimethyl ether and the constitution of prunetol (genistein), A., 1255°.

Baker, W. E. B., conversion of sulphite waste liquors into tanning extracts; preparing concentrated sulphite-cellulose extract containing magnesium compounds, (P.), B., 799°.

Bakes, W. E. See Thayson, A. C.

Bakh, A. N., mechanism of poisoning of catalysts, A., 1012.

Bakh, A. N., and Oparin, A. I., regeneration of enzymes made inactive by heating, A., 1060.

Bakken, H. E., and American Magnesium Corporation, magnesium-aluminium alloy, (P.), B., 590.

[preparing and] volatilising metal [magnesium], (P.), B., 591.

production of magnesium, (P.), B., 832.

magnesium product; working magnesium; sublimation apparatus [for magnesium], (P.), B., 833.

Bakken, H. E., Harvey, W. G., and American Magnesium Corporation, production of magnesium, (P.), B., 833.

Bakonyi, S., acetone-ethyl alcohol fermentation, A., 545.

Bakr, A. M. See McBain, J. W.

Bakucz, J., [non-] detoxicating effect of dextrose in quinidine poisoning, A., 200.

Balaban, I. E., action of alkali arsenites on some halogenated organic compounds, A., 623.

Balaban, I. E., and King, H., trypanocidal action and chemical constitution. III. Arsinic acids containing the glyoxaline nucleus, A., 187.

Balabooza, V. S., content of various forms of carbohydrates in tobacco, A., 646.

Balaceano. See Fourneau, E.

Balandin, A., calculation of some characteristic constants of free ammonium, A., 29, 477.

complex compounds of beryllium with sodium hydrogen carbonate, A., 486.

contraction constants of salt hydrates, A., 788.

Balandin, A. See also Chlopkin, W.

Balarev, D., solubility and grain size. II, A., 344.

reactions in the solid state, VI, A., 692.

surface tension of crystals of barium sulphate and gypsum, A., 790.

new types of mixed crystals, A., 1195.

dehydration of gypsum, A., 1217.

Balassa, L. See Sachs, G.

Balch, R. T., and Paine, H. S., practical methods of p_H measurement and the scheme of automatic electrometric control of cane juice defecation, B., 841, 927.

Balch, R. T. See also Paine, H. S.

Balderton, L., preparation of leather for analysis, B., 138.

Balderton, M., origin of K -radiation from the target of an X-ray tube, A., 767.

Baldes, E. J. See Mann, F. C.

Baldeschwieler, E. L., and Standard Development Co., obtaining vanadium values, etc. [from petroleum], (P.), B., 133.

Baldrecco, G., measurement of hydrogen-ion concentration in its application to the tanning industry, B., 957.

Baldsiefen, W. D., Sease, V. B., and Renwick, F. F., silver iodide in photographic emulsions, B., 466.

Baldwin, O. R., and Jeffery, G. B., electron orbits on relativity theory, A., 637.

Balint, M., hydrogen-ion concentration and "electropoly," A., 125.

Balke, P., and Leyssifer, G., producing plastic masses from cellulose derivatives, (P.), B., 268.

Ball, G. See Mannich, C.

Ball, R. W. See Seyer, W. F.

Ballard, A. M. See Oberfell, G. G.

Ballard, W. E. See Metallisation, Ltd.

Ballay, M., Ludwig-Soret effect in alloys, A., 1193.

Balle, G. See L. G. Farbenind. A.-G.

Ballman, E. C. and Cassidy, J. H., air-cooled still, (P.), B., 425.

Bally, O., and Haco-Ges. A.-G. Born, arsenical albumin compound, (P.), B., 514.

Balmann, W. A. See Baker, T. T.

Balthazard, V., and Philippo, M., methaemoglobin is richer in oxygen than haemoglobin, A., 423.

Baly, E. C. C., and Riding, R. W., occurrence of helium and neon in vacuum tubes, A., 1191.

Baly, E. C. C., and Semmens, H. S., selective action of polarised light on starch grains, A., 34.

Balz, G., [roasting] kilns, (P.), B., 196.

kilns, (P.), B., 857.

Balz, G. See also Kliegl, A.

Balz, O. See Badische Anilin- & Soda-Fabrik, and L. G. Farbenind. A.-G.

Balz, P. See Wöhler, L.

Bamag-Magnus A.-G., apparatus for expelling ammonia from ammonical liquor, (P.), B., 538.

concentration of ores [by flotation], (P.), B., 756.

utilising waste heat in the production of water-gas, (P.), B., 910.

Baman, E. See Wüllstätter, R.

Bamberger, C. See Dimroth, O.

Bamberger, E., [with Ormerod, L., and Reber, E.], reduction of aromatic nitro-compounds and action of alcoholic potassium hydroxide on arylhydroxyl-anilines, A., 513.

Bamberger, E., Padova, R., and Ormerod, E., nitro- and amino-formazyl, A., 416.

Bamberger, K., and Schweizer, R., production of copper mirrors on glass, (P.), B., 241.

Bamberger, M., and Nussbaum, J., electrolysis of alkali chlorides, (P.), B., 135.

Bamford, A. C., [lifting device for bowls of] centrifugal separator, (P.), B., 178.

Bamford, A. C. See also De Laval Chadburn Co., Ltd.

Ban, N. See Gerngross, O.

Baneelin, J., adsorption of dissolved substances, A., 19.

Bancroft, W. D., water equilibrium, A., 1100.

Banerji, B. B., electrode capacity and resistance of electrolytes for a wide range of frequencies, A., 246, 801^a.

Banerji, D. See Ghosh, P. N.

Banerji, K. See Raman, C. V.

Banfield, F. H., and Kenyon, J., constitution of the condensation product of β -phenylhydroxylamine and acetone, A., 828.

Bang, I., determination of arsenic, A., 39.

arsenic content of urine. I. and II, A., 195.

Bang, O., mineral metabolism of horses fed solely on bran, A., 1056.

Bangert, F. See Wittig, G.

Bangerl, B. See Schmid, L.

Banholzer, W. See Windisch, W.

Banigan, T. F. See Bassett, H. P.

Bannister, C. O., corrosion of an ancient tin specimen, B., 327, 792^a.

Bansen, H., influence of materials and operation duration on the heat equilibrium and temperature in the Thomas process, B., 981.

Bansi, H. W., and Ucko, H., peroxydase. I. and II, A., 1176.

Bansi, H. W. See also Ucko, H.

Barash, M., coking of coals, and a proposed standard method for the determination of the agglutinating value of coal, B., 730.

steaming in continuous vertical retorts, B., 938.

Barath, E., and Gyrkovitch, T. von, effect of calcium on man. II. Effect of calcium salts on nitrogen excretion in health and in renal disease, A., 863.

Barattini, G. See Clusa, R.

Barbaudi, J., distillation of heterogeneous ternary mixtures. I. System water-benzene-toluene, A., 578.

system ethyl alcohol-benzene-water. I. Turbidity surface, A., 357.

system ethyl alcohol-benzene-water; densities and refractive indices of mixtures at 25°, A., 404.

miscibility, density, and refractive index in methyl alcohol-benzene-water mixtures, A., 671.

dehydration of aqueous alcohol by rectification with benzene, B., 107.

Barber Asphalt Co. See Forrest, C. N., and Miller, J. S., *jun.*

Barbet, E. A., extracting benzols from heavy oils, (P.), B., 179^a.

refining alcohol, (P.), B., 929^a.

removing tar from the vapours arising from the carbonisation of wood, (P.), B., 908^a.

Barbier, Béonard, & Turenne (Soc. Anon.), manufacture of gas, (P.), B., 813.

Barbour, A. D., interaction of insulin, muscle-tissue, and dextrose, A., 435.

Barbour, H. G., and Hamilton, W. F., falling drop method for determination of specific gravity, A., 1193.

Barclay, E. H. See Patrick, W. A.

Barcroft, J., haemoglobin, A., 750.

Bardon, (Mle), and Ramar, (Mme), P., action of organo-magnesium derivatives on glycidic esters, A., 950.

Bardorff, C. F., entrainment phenomena in vacuum pans concentrating sugar solutions, B., 894.

Bard, H., reduction of neutral and acid metal-salt solutions, (P.), B., 822.

Barducci, P., drying plant, (P.), B., 256.

Bardwell, D. C. See Lind, S. C., Perry, J. H., and Porter, F.

Bargellini, G., phenylcoumarin, A., 302.

3-phenyl-4-methylcoumarin, A., 302.

Barger, G., deterioration of [timber] structures in sea water, B., 878.

Barger, G., and Stewart, G. P., β -iminozoyl-4 (or 5)-pyruvic acid, A., 1260.

Barger, W. R., and Hawkins, L. A., treatment of fruit for the prevention of decay, (P.), B., 993.

Barjot, H. M. R., separation of hydrogen from water-gas, coke-oven gas, and similar gases, (P.), B., 584.

Barker, J. H. See Greenwood & Batley, Ltd.

Barker, M. F., calorific value and constitution, A., 28.

Barker, S. G., and Hedges, J. J., determination of the dry weight of wool, B., 943.

Barker, S. G., and Hirst, H. R., colour problems in the woollen and worsted industries, B., 976.

Barker, T. V. See Morgan, G. T.

Barker, W. F. See Thomas, J. S.

Barker, W. M., dryer, (P.), B., 808.

balanced ball mill, (P.), B., 808.

Barker, W. M. See also Bonnot, L. C.

Barkholt, H., application of rotating tubes in crystallisation and evaporation, B., 143.

Barkholt, H. See also Agde, G.

Barkla, C. G., light quanta and photo-electric emission, A., 447.

Barkla, C. G., and Kasthgar, S. R., "modified scattered" X-radiation, A., 217.

scattered X-rays; the β -phenomenon. IV, A., 937.

Barklie, R. H. D. See Allmand, A. J.

Barlot, J., displacement of metals [from solutions of their salts], A., 1216.

Barlow, A. C., electrolytic deposition of metallic coatings upon metals, (P.), B., 935.

Barnard, C. M., and British Alizarine Co., Ltd., dyeing of cellulose ester artificial silks, (P.), B., 628.

Barnard, C. M. See also Brit'sh Alizarine Co., Ltd.

Barnes, A., Broadhead, R. W., and Dempster, R., & Sons, Ltd., apparatus for quenching and conveying discharged coke, (P.), B., 1006^a.

Barnes, B. T., interferometer measurements of the pressure-shift of lines in the arc spectrum of nickel, A., 986.

Barnes, W. H. See Maass, O.

Barnett, E. de B., Cook, J. W., and Matthews, M. A., mechanism of substitution reactions in the aromatic nucleus. VI, A., 295.

Barnett, E. de B., and Matthews, M. A., 1:5-dichloro-9-phenylanthracene, A., 617.

9-methylene-, 9-methyl-, and 9:9-dimethyl-anthrone, A., 618.

alkylanthracenes and "transannular tautomerism," A., 1030.

Barnett, E. de B., Matthews, M. A., and Wiltshire, J. L., mechanism of substitution reactions in the aromatic nucleus. VII, A., 193^a.

Barnett, M. See Burgess, L.

Barnette, R. M., synthetic calcium silicates as a source of agricultural lime. II. Comparison of their influence with that of other forms of lime, upon certain microbiological activities in the soil, B., 763.

Barney, R. E., analysis of sweat, A., 317.

Barnickel, W. S. & Co. See De Groot, M.

Barnitt, J. B., treatment of chocolate, (P.), B., 106.

Barr, G., air bubble viscosimeter, A., 343.

Barr, J. A., and International Agricultural Corporation, drying or calcining, (P.), B., 425.

Barratt, J. O. W., hydrolytic dissociation curves, A., 245.

Barratt, S. See Sowerby, A. L. M.

Barrensheen, H. K., and Berger, R., blood-sugar. VII. Blood-sugar and phosphoric acid curves. 5. Insulin, A., 1270.

Barrensheen, H. K., Doleshall, F., and Popper, L., blood-sugar. III. Blood-sugar and phosphoric acid curves. 1. Methods. IV. 2. Dextrose. V. 3. Levulose and galactose. VI. 4. Diabetics, A., 1270.

Barrensheen, H. K., and Eisler, A., blood-sugar. II. Alimentary hyperglycemia curves, A., 1270.

Barrensheen, H. K., Kabler, H., and Hechi, H., blood-sugar. I. Reduction and rotation of the blood-sugar after administration of dextrose *per os* and intravenously, A., 423.

Barrensheen, H. K., and Popper, L., reducing and iodine-combining power of urine. I. In normal individuals, A., 88.

Barret, A. See Gruitonnaan, G.

Barrett, G. R. See Kohler, E. P.

Barrett Co., and Cushing, D., melting and refining non-ferrous metals, (P.), B., 97.
 Barrett Co. See also Downs, C. R., and King, W. W.
 Barratt, J., literature of keratin (the principal constituent of wool), B., 530.
 Barratt, J., and King, A. T., sulphur content of wool. I. Inherent variations according to the type of wool, B., 870.
 Barro, C., preparation of lecithin from eggs, B., 564.
 Barry, R. J., dehydrating crude oil, (P.), B., 814.
 Barsch, H., See Bucherer, H. T.
 Barsky, G., and American Cyanamid Co., method of making potassium ferricyanide, (P.), B., 708.
 Barstiller, (P.), B., 991.
 Bart, B., depositing silver, (P.), B., 369.
 Bartels, A. See Internat. Galalith-Ges. Hoff & Co.
 Bartels, H., spectral intensity distribution and electron jumps in the Bohr model, A., 773.
 Bartels, W. See Liming, O.
 Barth, A., electrolysis or with stirring device, (P.), B., 413.
 Barth, T., crystal structure of perovskite and related substances, A., 661.
 Barth, T., and Lunde, G., influence of the lanthanide contraction on the lattice dimensions of the cubical platinum metals, A., 114.
 lattice constants of the platinum metals and of silver and gold; the lanthanide contraction, A., 664, 1195.
 mixed crystals, A., 895.
 Barth, T. See also Goldschmidt, V. M.
 Barth, W., Interferometry. I. Zeiss-Lowe liquid interferometer. II. Examination of very dilute solutions, A., 779.
 Barth, W. See also Schaub, K.
 Barthélemy, L., and Dufilho, E., determination of sodium; applications; determination of sodium in mineral waters and milk, B., 644.
 Barthel, C., reduction test of milk and its theoretical basis, B., 105.
 Barthel, C., reduction test of milk, B., 605.
 Barthel, C., and Bengtsson, N., decomposition of incrustated cellulose in oil. I. Straw and sawdust in loamy and sandy soil, B., 610.
 Barthel, C. See also Euler, H. von.
 Barthélémy, H., effect of hydrogen-ion and salt concentration on survival of spermatophores of *Rana fusca*, A., 1273.
 condensation of formaldehyde with phenols and urea, B., 955.
 Barthelmess, E., method of grinding or crushing, (P.), B., 775.
 Bartlett, C. O. & Snow Co. See Gertz, S.
 Bartlett, W. J. See British Thomson-Houston Co.
 Bartlett-Hayward Co. See Kuehn, P. M.
 Bartling, F. See Troeknungs-, Verschwendungs-, und Vergasungs-, Ges.m.b.H.
 Barton, A. W., efficiency of β -ray recoil of radium-C from radium-B, A., 553.
 Barton, F. See De Ros, D.
 Barton, H. A., ionisation of hydrogen chloride, A., 1189.
 Barton, H. A., Harnwell, G. P., and Kunsman, C. H., analysis of positive ions emitted by a new source, A., 769.
 Barton, H. A. See also Smyth, H. D.
 Barton, P. D. See Frutzman, P. W.
 Barton-Wright, E. See Dorée, C.
 Bartow, E., disposal of some organic trade wastes, B., 998.
 Bartsch, O., foaming power and surface tension, A., 348.
 wetting adsorption; adsorption of deformable substances, A., 572.
 action of molten glass on refractory materials, B., 274.
 Barry, J. See Cournot, J.
 Barry, P., dielectric breaking stress of liquids [transformer oils], B., 793.
 Basart, J. See De Boer, J. H.
 Basch, D. See Fuller, T. S.
 Bascom, P. H. See Bacon, R. F.
 Bashloff, I., method of separating radium and barium salts, (P.), B., 742.
 Basini, A. See Rossi, G.
 Basler, R. See Stark, H. C., Kommanditges. auf Aktien.
 Bass, J. W. See Levene, P. A.
 Bassett, H. P., method of making ar-enates, (P.), B., 89.
 process of making sodium sulphide, (P.), B., 683.
 Bassett, H. P., Banigan, T. P., and Melgs, Bassett, and Slaughter, Inc., spinning artificial silk, etc., (P.), B., 48.
 process of making acetylated nitrocellulose, (P.), B., 704.
 Bassett, H. P., Isaacs, M. R., and United Products Corp. of America, composition of matter; [insecticide], (P.), B., 223.
 Bassett, H. P., and Lathrop, E. C., method of making arsenates, (P.), B., 708.
 Basterfield, S., and Paynter, L. E., urethanes. I. Mono- and di-carboxyguanidines; dicarboxyethylisocarbamide, A., 1027.
 Basterfield, S., Woods, E. L., and Wright, H. N., urethanes. III. Preparation of various substituted urethanes, A., 1132.
 Basterfield, S., and Wright, H. N., urethanes. II. Isomeric urethane derivatives of phenylacetic acid, and related compounds, A., 1138.
 Bastible, (Miss) H. E. See Reilly, J.
 Batasche Petroleum Maatschappij. See De Brey, J. H. C., and Mackenzie, H. J.
 Bataille, E., neutralising and bleaching oils under heat and vacuum conditions, (P.), B., 448.
 Batchelor, R. P., Fehnel, J. W., Thomson, R. M., and Drinker, K. R., clinical and laboratory investigation of the effect of metallic zinc, of zinc oxide, and of zinc sulphide upon the health of workmen, B., 854.
 Bates, S. C., iron and steel: sulphuric and nitric [acid] corrosion, B., 982.
 Bateman, C., neutralisation of sulphate of ammonia and notes on manufacture, B., 404.
 Bateman, E., producing highly adsorbent charcoal, (P.), B., 308.
 Bateman, E., and Hubert, E. E., prevention of sap staining and molding [on wood], (P.), B., 981.
 Bates, J. R. See Taylor, H. S.
 Bates, P. H., high-alumina hydraulic cements, B., 632.
 Bates, S. J. See Harris, L.
 Bates, W. H., precipitating gold from solutions, (P.), B., 97.
 Bates, W. P., dyestuffs, (P.), B., 434.
 Batham, H. N., nitration in soils, B., 70.
 Batscha, B., fluorescence of fluorescein in acid solutions, A., 335.
 Batschinski, A., and Schaposhnikov, K., dependence of the density of a liquid on the temperature, A., 999.
 Batson, R. G. See Rosenthal, W.
 Battegay, M., and Braun, P., production of photographic images with diazo-compounds, B., 854.
 Battersby, J. W. See Chemical Engineering Co. (Manchester), Ltd.
 Band, P., agave pulp as a source of industrial alcohol, B., 642.
 Baudisch, O. See Davidson, D.
 Bauer, E., electrical structure of molecules, particularly of mesomorphic substances (anisotropic fluids), A., 779.
 Bauer, E. See also Württembergische Metallwarenfab.
 Bauer, H., and Strauss, E., combination of complex bismuth salts in the serum, A., 92.
 Bauer, K. See Meisenheimer, J.
 Bauer, K. H., China wood [tung] oil, B., 551.
 polymerised linseed oil, B., 637.
 polymerisation and oxidation of unsaturated fatty acids, B., 836.
 Bauer, K. H., and Gonser, K., congoconic acid, A., 1226.
 Bauer, O., chemical and physical processes in rusting and corrosion, B., 56.
 Bauer, O., and Arndt, H., behaviour of some metals and alloys with plastillin and free sulphur, B., 327.
 Bauerfeld, F. See Schulz, E. H.
 Bauerhäfer, W. See Marcussen, J.
 Baumhauer, W. P. See Jamieson, G. S.
 Baukovac, O. See Kremann, H.
 Baum, P. See Consortium für Elektrochem. Ind.
 Baum, P., water content of glue and its importance in glue valuation, B., 958.
 Baum, G., distillation of persulphuric acid and of solutions of persulphuric acid salts, (P.), B., 438.
 methods of testing oils for transformer, switcher, and turbines, B., 475.
 Baumann, C., Kuhlmann, J., and Grossfeld, J., method of Bertram, Bos, and Verhagen for the determination of coconut oil and milk fat, B., 499.
 Baumann, E. J., and Holly, O. M., I. Cholesterol and phosphatide metabolism in pregnancy. II. Cholesterol and phosphatide distribution in some tissues of pregnant and non-pregnant rabbits, A., 429.
 Baumann, E. J. See also Noyes, H. M.
 Baumann, J., [combustion temperatures of] pyrites and zinc-blende, B., 87.
 carbide furnace balance, B., 871.
 Baumann, O., preparation and examination of cheese fat, B., 688.
 Baume, G., coke from mixtures of solid and less volatile liquid fuels, (P.), B., 573.
 Baume, G., and Société de Recherches et Perfectionnements Ind., extraction of oil shale and oil-sand, (P.), B., 39.
 Baumgärtner, Katz & Co. G.m.b.H., coating paper pulp vessels and plates, for protection against the action of moisture, fat, and soap, (P.), B., 783.
 Baumgarten, F. See Kehrmann, F.
 Baumgarten, P., degradation of pyridine to glutaconaldaldehyde. II. N-Pyridinium-4-phenylphonic acid, A., 844.
 sulphonation of inorganic and organic compounds, A., 1130.
 Baumgarten, P. See also Traube, W.
 Baumgarten, S. See Weissenberger, G.
 Baumgarten-Crusius, A. See Falkenfor-Studien ges. m.b.H.
 Baumritter, P., uric acid in the cerebro-spinal fluid, A., 636.
 Bauer, E., photolysis of methylene-blue sensitised by zinc oxide, A., 585*.
 placed in the ternary system $\text{Fe}_2\text{Cl}_9\text{-Fe}_2\text{O}_3\text{-H}_2\text{O}$, A., 1102.
 Bausch, S. See Lottermoser, A.
 Barendam, W. See Ruschmann, G.
 Bauer, L. D., use of the quinhydrone electrode for measuring the hydrogen-ion concentration of soils, B., 457.
 Bauer, H., use of leucotropine [phenylbenzylidinemethylanilinium chloride] as benzylating agent, A., 1034.
 Bawden, A. T. See Foulk, C. W.
 Baxandall, F. E., nitrogen in the sun and star, A., 445.
 Baxter, G. P., and Cooper, W. C., revision of the atomic weight of germanium. II. Analysis of germanium tetrabromide, A., 6.
 Baxter, G. P., and Starkweather, H. W., density and atomic weight of helium, II, A., 233.
 Baxter, W. P., Inter-ionic attraction theory of ionised solutes. V. Testing of the theory by solubility experiments at higher temperatures, A., 474.
 Bayer, K. See Kremann, H.
 Bayer, O. See Braun, J. von.
 Bayer & Co. See Farbeni. vorm Bayer & Co.
 Bayer, Gebr., absorption refrigerating machines, (P.), B., 32.
 Baykoff, setting of hydraulic cements, B., 193.
 Bayley, F. See Courtaulds, Ltd.
 Baylis, J. R., turbidimeter for accurate measurement of low turbidities, A., 378.
 natural water corrosion and hydrogen-ion concentration, B., 95.
 factors other than dissolved oxygen influencing the corrosion of iron pipes, B., 493.
 hydrogen-ion concentration [of water] and corrosion, B., 493.
 prevention of corrosion and "red water," B., 694.
 Bayliss, L. E., Kerridge, (Miss) P. M. T., and Verney, R. C., determination of the hydrogen-ion concentration of the blood, A., 872.
 Baziakina, (Miss) N. A., experiments on the purification of sewage water on aero-filters in 1923 [in Moscow], B., 517.
 velocity of dissolution of oxygen as one of the factors of biological [sewage] purification, B., 617.
 Beaber, N. J. See Gilman, H.
 Beach, H. T. See Bond, P. A.
 Beacham, T. E. See Hole-Shaw, H. S.
 Beal, C. L., Eberlin, L. W., and Eastman Kodak Co., electro-deposition of organic materials [rubber, etc.] on anodes from aqueous emulsions, (P.), B., 793.
 Beal, C. L. See also Eberlin, L. W., and Sheppard, S. E.
 Beal, G. D., and Katt, M. C. T., determination of the anthraquinone derivatives in cathartic drugs, B., 767.
 off of *Pongamia glabra*, B., 954.
 Beal, R. B. See Nicholson, E. E.
 Beale, A. See Firthright Co., Ltd.
 Beale, E. S. L. See Dunstan, A. E.
 Beale, J. F. See Thresh, J. C.
 Beals, C. S., quartet terms in arc spectrum of copper, A., 651.
 regularities in the spectrum of ionised silver, A., 1071.
 Beams, J. W., time interval between the appearance of spectrum lines in spark and in condensed discharges, A., 1069.
 Bear, A. W. See Wilson, J. A.
 Beard, H. G. See Hodgson, H. H.
 Beard, H. H., nutrition of the white mouse. II. Rôle of certain sulphur compounds. III. Vitamin factors in the nutrition of mice, A., 429.

Beard, H. H., and Jersey, V., rotatory power of dextrose-insulin solutions in contact with muscle-tissue *in vitro*, A., 1180.

Beasley, W. H. See Edser, E.

Beath, O. A., natural occurrence of aconitic acid and its isomerides, A., 1025.

Beattie, F., and Milroy, T. H., rôle of the phosphates in carbohydrate metabolism in skeletal muscle, A., 637.

Beattie, J. F., [motor] fuel, (P.), B., 733.

Beatty, W. A. See Beech-Nut Packing Co.

Beaudquin, J., manufacture of combustible briquettes, (P.), B., 349, 815^a. making coal briquettes of anthracite quality from immature carboniferous substances, (P.), B., 815^a.

Beaumont, J. H., manufacture of hydrogen, (P.), B., 946.

Beaver, J. J. See Bernhard, A.

Beezley, R. G. L. See Nanji, D. R.

Beber, M. See Margulis, S.

Becher, E., diazo- and urochromogen reaction of blood filtrate in renal insufficiency, A., 426.

Becher, E., and Litzner, S., appearance of phenol in the blood during kidney insufficiency, A., 1054.

Becher, E., Litzner, S., and Täglich, W., phenol in normal and pathological blood, A., 752.

Bechert, K., and Catalán, M. A., arc spectrum of palladium, A., 214. general rules of optical spectra, A., 873.

Bechhold, H. I. Colloid chemistry of urine. II. The making visible of albumin molecular aggregates and other subvisible structures, A., 902.

Bechhold, H., and Heymann, E., concentration and purification of solutions of hydrophilic colloids, A., 792.

Bechhold, H., and Karplus, H., recovering waste sulphuric acid from manufacture of parchment paper, (P.), B., 316.

Bechhold, H., and Villa, L., method for rendering visible molecular aggregates of albumin and other submicroscopic structures, A., 351.

Bechtereiv, P., Eder's photochemical reaction and some properties of salts taking part in it, A., 920.

Beck, A. See Chem. Fabr. Griesheim-Elektron.

Beck, G., Compton effect and quantum mechanics, A., 875. connexion between energy of formation, contraction, and polymerisation in chemical reactions, A., 1211.

Beck, G. See also Ephraim, F.

Beck, O. See Badische Anilin- & Soda-Fabrik.

Beck, W. See Ettisch, G., and Freudlich, H.

Beck, W. J., Aupperle, J. A., and American Rolling Mill Co., enamelling metal, (P.), B., 1083.

Becke, F., graphical representation of rock analyses, A., 815.

Becker, A., penetration of matter by corpuscular radiation, A., 1076.

Becker, A. E., surface action and fluid film lubrication, B., 615.

Becker, A. E., and Standard Development Co., lubricant, (P.), B., 733.

Becker, B. See Schmid, L.

Becker, C., new carbon electrode, B., 198.

Becker, C. See also Viskose, A.-G.

Becker, E., and Poldühne, non-magnetic steel, (P.), B., 368.

Becker, H., increase in the viscosity of oils subjected to a silent discharge, B., 860.

Becker, H. See also Stern, E.

Becker, H., sen., manufacture of porcelain bodies which can be easily fused and cast, (P.), B., 824.

Becker, H. H. See Ulmen, P. C.

Becker, J. See Kopfers Co.

Becker, J. A., thermionic and adsorption characteristics of cesium on tungsten and oxidised tungsten, A., 988.

Becker, J. E. See McCallum, E. V.

Becker, K., polarisation capacity of platinised platinum electrodes in aqueous solutions of potassium ferro- and ferri-cyanide, A., 801.

Becker, M. L., equilibrium at high temperatures in the iron-carbon-silicon system, A., 245^a, B., 132^a.

Becker, R., plasticity of amorphous and crystalline solids, A., 230.

Becker, T. See Deed, L.

Becker-Rose, H. See Agte, K.

Beckers, A., construction of coke ovens, (P.), B., 353^a, 624^a. self-packing coke-oven doors, (P.), B., 353^a.

Becket, F. M., [making] rustless iron and similar alloys, (P.), B., 195.

Becket, F. M., and Electro Metallurgical Co., nickel-plated article, (P.), B., 63.

Beckett, E. G. See Scottish Dyes, Ltd.

Beckett, E. H., condensing and/or cooling apparatus, (P.), B., 346^a.

Becking, L. B., and Gregersen, M. I., effect of light on the permeability of lecithin, A., 254.

Beckman, J. W., and Beckman-Linden Engineering Corporation, reducing metal sulphides, (P.), B., 548.

Beckman-Linden Engineering Corporation. See Beckman, J. W.

Beckmann, C. O. See Zanetti, J. E.

Beckmann, H., manufacture of rubber with innumerable microscopically small pores, (P.), B., 957.

Bequerel, J., Onnes, H. K., and De Haas, W. J., absorption spectra of rare-earth crystals in magnetic field at the temperature of liquid helium, A., 14. absorption spectra of compounds of the rare earths, A., 659.

Bequereel, J. See also Onnes, H. K.

Bedford, C. S., mordanting and dyeing of wool, (P.), B., 706.

Bedford, C. W. See Sebrell, L. B.

Bedos, P., geometrical stereoisomerism in the cyclohexane series. IV. Action of magnesium phenyl bromide on cyclohexene oxide; *o*-phenylcyclohexanols; cyclohexane-1:2-diol bromohydrin; *d*³-cyclohexenol, A., 508.

geometrical stereoisomerism in the cyclohexane series. V. 2-cycloHexylcyclohexanols, A., 608.

geometrical stereoisomerism in the cyclohexane series. VI. Menthols and menthones, A., 729.

reactions of cyclohexene oxide, A., 1238.

stereochemistry of *o*-cyclohexanediols and structure of cyclohexene oxide, A., 1238.

Bedos, P. See also Godchot, M.

Bedrag, C. G., physical structure of the elements, A., 7, 338^a. Volta effect, A., 447.

arc spectra of copper, A., 651.

complex structure of the copper spectrum, A., 766.

Beebe, M. C., Murray, A., and Wadsworth Watch Case Co., photographic media and process, (P.), B., 300^a, 773. photographic medium, (P.), B., 421.

photographic sensitiser, (P.), B., 421.

natural resin photographic medium and process, (P.), B., 773.

Beebe, M. C., Murray, A., Herlinger, H. V., and Wadsworth Watch Case Co., condensation photographic process and media, (P.), B., 773.

synthetic resins, photographic process and media, (P.), B., 773.

Beebe, M. C., and Wadsworth Watch Case Co., light-sensitive medium and process of producing it, (P.), B., 517.

Beech, F. B., zeolite water softening, B., 468.

Beech-Nut Packing Co., and Beatty, W. A., jelutong product, (P.), B., 555.

Beek, P. A. van der. See Jorissen, W. P.

Beer, A. W., materials for spray fluids and seed pickling, (P.), B., 813.

Beec, N. C. See Sawyer, R. A.

Begemann, H. See Schoorl, N.

Béguin, C. See Bridel, M.

Behimer, O., and Texas Co., apparatus for treating hydrocarbon oils, (P.), B., 623.

Behimer, O. See also Holmes, R. C.

Béhounek, F. determination of the content of radon in the atmosphere, A., 220.

Béhounek, F. See also Curie, (Mme.) I.

Behr, H. C., machine [horizontal centrifuge] for separating liquids from solids, (P.), B., 344, 695.

apparatus for separating liquids from solids, (P.), B., 649.

Behre, J. See Greiner, W.

Behre, J. A., and Benedict, S. R., colorimetric method for determination of acetone substances in blood and urine, A., 1282.

Behre, J. A. See also Benedict, S. R.

Behrend, R. See Poetsch, G.

Behrns, B., absorption, excretion, and distribution of minute quantities of lead, A., 92.

Behrns, M., and Ivanov, N. N., carboligase, A., 544.

Behrns, W. M. See also Abderhalden, E., and Neuberg, C.

Behrns, W. U., quantitative analysis of mixtures of volatile fatty acids by division between ethyl ether and water, A., 1266.

determination of acids in acid foods, B., 1027.

Behringwerke A.-G., preparation of micro-organisms free from nucleic acids, containing only lipoids and lipoproteins, (P.), B., 851.

preparation of metal-containing yeasts and other micro-organisms, (P.), B., 852.

Behrman, A. S., and International Filter Co., adsorbent material, (P.), B., 568.

Beiser, A. See Pringsheim, H.

Beissner, E. See Posner, T.

Beja, M. See Riesenfeld, E. H.

Bejek, E., and Trzecialak, S., speed of dissolution of copper in aqueous solutions of ferric chloride, A., 482.

Bela, M. See Lialikov, K.

Bela, D., and Belais, Inc., D., white gold [alloy], (P.), B., 590.

Belais, Inc., D. See Belais, D.

Belak, A., and Szep, E., antagonism of ions; ionisation of calcium, A., 907.

Belenki, M., catalytic phenomena in the decomposition of potassium chlorate, A., 916.

Belgrave, W. N. C., *Hevea* latex. IV. Proteins. V. Possible occurrence of a coalescing enzyme, B., 288.

Belikov, A. See Sorkin, V.

Beling, R. W. See Kappen, H.

Bell, F. A., and Kenyon, J., acetyl-*o*-phenylenediamine [*o*-aminoacetanilide] and acetyl-1:2:3-benztriazole, A., 741.

hydrolysis of *o*-benzylideneamino phenyl acetate, A., 947.

diphenyl series. II. Substitution reactions, A., 1241.

Bell, F. K., infra-red absorption spectrum of molten naphthalene, A., 9.

infra-red absorption spectra of organic derivatives of ammonia. II. *o*-Naphthylamine and some mono- and di-alkyl-*o*-naphthylamines, A., 222.

infra-red absorption spectra of organic derivatives of ammonia. III. Di- and tri-phenylamine. IV. Mono-, di-, and tri-benzylamine, A., 453.

infra-red absorption spectra of the alkaloids. I. Tropan derivatives, A., 1264.

Bell, H. S. See Trotman, S. R.

Bell, J., hydrolysis of guanidine, A., 825.

constitution of dicyanodiamide; a mercury derivative, A., 1129.

Bell, J. E., London, J. H. A., and International Combustion Engineering Corporation, pulverising apparatus, (P.), B., 967.

Bell, J. E., and Sinclair Refining Co., fractional condensation, (P.), B., 345.

cracking oils under pressure, (P.), B., 397.

operation of oil stills, (P.), B., 397.

oil distillation, (P.), B., 478.

Bell, J. E. See also Isom, E. W., Kreisinger, H., and Sinclair Refining Co.

Bell, J. M., and Murphy, G. M., basic copper sulphate at 100°, A., 798.

Bell, L. M. T. See British Thomson-Houston Co., Ltd.

Bell, M. See Blatherwick, N. R.

Bell, R. W., separating proteins and other matter from whey in soluble form, (P.), B., 1027.

Bell, W. A. J. See Fleck, H., and Thews, K. B.

Bell, W. E. H., and Butterworth, H. W., & Sons Co., dyeing machine, (P.), B., 1011.

Bell Telephone Laboratories, Inc., electron discharge devices, (P.), B., 551.

filaments for electron discharge devices, (P.), B., 922.

Bell Telephone Manufacturing Co., alloy for electrical contacts, (P.), B., 61, 756.

Bellamy, H. T., and Western Electric Co., casting slip, (P.), B., 586.

Bellamy, H. T., photographic reversal, B., 693.

photographic solarisation, B., 721.

Bellwood, R. A. See Downs, C.

Benary, E., [hydroxymethylene ketones], A., 500.

hydroxymethylene ketones, particularly those derived from methyl ethyl ketone, A., 1227.

Benary, E., Meyer, Hans, and Charisins, K., hydroxymethylene ketones, A., 272.

Bencowitz, I., vapour-pressure lowering as a function of the degree of saturation. I., A., 29.

Bencowitz, I., and Hotchkiss, H. T., jun., vapour-pressure lowering as a function of the degree of saturation. II., A., 787.

Boncowitz, I., and Renshaw, R. R., basis for the physiological activity of certain -onium compounds. V. Mobilities of the -onium ions. II. A., 1027.

Bonila, L. See Cassella, L. & Co., and L. G. Farbenind. A.-G.

Bendien, W. M., preparation of a pure gold sol, A., 575.

Bendixen, K. See Ehrenreich, A.

Bendixen, N., and E. R. M. Co., Ltd., extraction, solution, and mixture of soluble and insoluble substances, (P.), B., 696².

Bendixen, N., McKechnie, W. E., and Reid, E. L., apparatus for extraction, solution, and mixture of soluble and insoluble substances, (P.), B., 2.

Benedicks, C., Bäckström, H., and Sederholm, P., anomalies in heat conduction in spherical steel specimens, with determinations of thermal (and electrical) conductivity in iron and carbon steels, B., 828.

Benedicks, C., and Sundberg, R., electrochemical potentials of carbon and chromium steels, B., 827.

Benedicks, C. See also Dearden, W. H.

Benedict, E. B. See McIvor, M. A.

Benedict, E. M., Dakin, H. D., and West, R., biochemical behaviour of glucose, A., 754.

Benedict, E. M. See also West, R.

Benedict, F. G., and Fox, E. L., determination of energy values of foods and excreta, A., 420.

Benedict, F. G. See also MacLeod, G.

Benedict, S. R., determination of sugar in blood and normal urine, A., 934.

Benedict, S. R., and Nash, T. P., jun., site of ammonia formation and rôle of vomiting in ammonia formation, A., 1053.

Benedict, S. R., Newton, E. B., and Behre, J. A., new sulphur-containing compound (thiazine) in blood, A., 421.

Benedict, S. R. See also Behre, J. A.

Benesch, E., rapid method for the analysis of sulphur chloride, B., 787.

Bentley, H. See Ullman, F.

Bengough, G. D., and Sutton, H., protection of aluminium and its alloys against corrosion by anodic oxidation, B., 882.

Bengtsson, N., determination of incrusted cellulose in soil, B., 640.

Bengtsson, N. See also Barthel, C.

Benischek, A. See L. G. Farbenind. A.-G.

Benn, H. P. See Egloff, G.

Banner, H. W. See Kaemmerling, G. H.

Banner, R. C., and Prest-O-Lite Co., Inc., composition for storage-battery positive electrodes, (P.), B., 413.

Bennett, A. L., use of overglazes for polychrome terra-cotta, B., 489.

Bennett, C. T., and Garratt, D. C., determination of morphine in poppy extracts, B., 801.

Bennett, G. M., lengthened chain compounds of sulphur, A., 1123.

Bennett, G. M., and Hock, A. L., $\gamma\gamma'$ -dichlorodipropyl sulphide, A., 146.

Bennett, H. G., sampling tanning materials, leather, etc., for analysis, B., 454.

Bennett, H. H., properties of humid-tropical and humid-temperature American soils with reference to relations between chemical composition and physical properties, B., 640.

Bennett, H. T., Murphy, G. B., and Story, L. R. G., product derived from acid sludge, (P.), B., 231.

Bennett, I. T., and Murray, T. E., protection of metals [iron] against corrosion, (P.), B., 495.

Bennett, M. A., changes in acid-base equilibrium of the blood caused by haemorrhage; p_1 of serum and plasma of dog blood; colorimetric determination of p_1 of blood plasma, A., 1165.

Bennett, N. See Owen, W. L.

Bennewitz, K., and Sohniz, J., absolute electrolytic solution tension. I. Determination by the scraping method, A., 1212.

Bennewitz, K., and Splittergerer, E., investigations in the critical region. I. Specific heats of carbon dioxide at the critical point, A., 1210.

Bennhold, W., and Pintsch, J., A.-G., gas producer with a revolving grate, (P.), B., 473².

Benninghoyon, C. D. See Foster, G. L.

Bennion, P., and Clarke, J. B., saggers and setters employed for firing pottery and other ware (P.), B., 747².

Bennison, A. D. See Prantzman, P. W.

Bennath, A., acid salts of the chloropentamminocobaltic radical, A., 483. basic salts, A., 695.

Bennath, A., [with Weiland, H., Hamacher, H., and Kircheisen, E.], complex thallium compounds, A., 369.

Bennath, A., Diderichs, Geuer, J., Sass, Schleicher, Viedebant, and Kraheck, (Frl.), application of dilatometric and stalagmometric methods to kinetic investigations, A., 363.

Bennath, A., Niehaus, H., Meckenstock, H., and Essers, H., complex copper salts, A., 367.

Bensa, F. See Schöpfer, H., and Zinke, A.

Bensing, L. P. See Cooper, H. S.

Benson, H. K., Borglin, J. N., and Rourke, R. K., effect of sulphur in the briquetting of sub-bituminous coal, B., 256.

Bent, H. E., and Hunt, G. A., non-spattering, continuous-stream wash-bottle, A., 933.

Bent, H. E. See also Lewis, W. L.

Bent, W. G. See Kodak, Ltd.

Benthin, G. See Walther, R. von.

Bentley, W. H. See Riley, J., & Sons, Ltd.

Benton, A. F., adsorption of gases by platinum-black, A., 1001. gel of metallic platinum, A., 1203.

Benton, A. F., and Emmett, P. H., catalytic synthesis of water vapour in contact with metallic nickel, A., 482.

Benton, A. G., and Albery, H. G., stability of evaporated milk during sterilisation, A., 858.

Benz, J. See Farbw. vorm. Meister, Lucius, & Brüning.

Benz, P. See Karter, P.

Benzol-Verband Ges.m.b.H., motor fuel, (P.), B., 803.

Benzol-Verband Ges.m.b.H., production of plastic masses for use as paving materials, (P.), B., 879.

Berchin, N. U., valuation of artificial silks, B., 911.

Berzeller, L., and Wastl, H., nutrition studies and statistica. I. Chemical composition of wheat grains. II. Grain size and weight per hectolitre of wheat. III. Cellulose content of wheat grains, B., 992.

Berend, G. See Ohle, H.

Berentzen, H. See Hæhn, H.

Berestovo, N. I., and Masner, L., extraction of chromium from chrome tanned leather with sodium potassium tartrate. II. B., 1021.

Berestovo, N. I. See also Masner, L.

Beretevide, R. A., ferricyanide reaction of potassium morphine, A., 1048.

Beretta, A., triazole- α -carboxylic acids analogous to phthalic acid, A., 182. transformation of 2:4-dinitro-4'-phenylazodiphenylamine into phenazine derivatives, A., 307.

Berger, L., lithium chloride, A., 1014. sulphur black from benzeneazodinitro diphenylamine, B., 865.

Beretta, A. See also Charrier, G.

Berezovska, F. I., electronic nature of isomeric transformations, A., 887.

Berg, L., lithium chloride, A., 1014.

Berg, O., and Imhoff, M., weighting fibres, (P.), B., 485.

Berg, O., presence of rare elements in the food and excretions of man, A., 195. iodometric determination of chloride and the determination of chloride, bromide, and iodide in the presence of cyanide, A., 1017.

Berger, G., electron displacement *versus* alternate polarity in aliphatic compounds, A., 1194.

Berger, G. See also Olivier, S. C. J.

Berger, R. See Barrescheen, H. K.

Bergbau A.-G. Lothringen, distillation of [benzol] wash oil, (P.), B., 941.

Bergeim, O., intestinal chemistry. IV. Method for study of food utilisation. V. Carbohydrates and absorption of calcium and phosphorus. VI. Investigation of absorption in different parts of the intestinal tract. VII. Absorption of calcium and phosphorus in small and large intestines, A., 1170.

Bergel, F., rate of chlorination of toluene, A., 389.

Bergel, F. See also Wieland, H.

Bergen, W. von, influence of sunlight on wool, B., 312. dyeing properties of wool after exposure to sunlight, B., 740.

Berger, E. F. See Jenkins, J. D.

Berger, G. See Olivier, S. C. J.

Berger, O. H., cold bituminous paving composition, (P.), B., 825².

Bergius, F., Bergius process of converting coals into oils, B., 35. treating carbon and carbon compounds under heat and pressure, (P.), B., 814.

Berglund, H., nitrogen retention and kidney function, A., 971.

Bergman, A. G., water of hydration of crystalline compounds; tensimetric analysis of the system anhydride-water. I., A., 125.

Bergman, L. H., burning pulverised fuel, (P.), B., 117.

Bergmann, M., nomenclature of polysaccharides, A., 152. depilating hides and skins, (P.), B., 377.

Bergmann, M., and Ensslin, H., transformations of peptide substances. X. Isomeric diketopiperazines: *allo*-2:5-diketo-3-methylene piperazine and *allo*-2:5-diketo-6-methyl-3-methylene piperazine, A., 740.

Bergmann, M., and Gierth, M., isomeric alkyl derivatives of cyclohexan-2-ol-one, A., 728.

Bergmann, M., Immendorfer, E., and Immendorfer, A., removing hair from green hides, (P.), B., 1022.

Bergmann, M., Immendorfer, E., and Löwe, H., treatment of animal fibres with acid, alkaline, oxidising, or reducing liquors, (P.), B., 785.

Bergmann, M., Kann, E., and Miekeley, A., transformations of peptide substances. XI. Dehydrogenation of asparghines, A., 1235. amino-acid anhydrides and their behaviour towards tannins and dyes, A., 1259.

Bergmann, M., and Knehe, E., an associated hexose, A., 714.

Bergmann, M., and Köster, H., arginine and its conversion into ornithine, A., 1235.

Bergmann, M., and Stather, F., transformations of peptide substances. VII. Transformation of cystine-containing diketopiperazine, A., 631. transformations of peptide substances. IX. Isomeric diketopiperazines: *iso*-2:5-diketo-6-isobutyl-3-methylene piperazine, A., 740. unheating process; alteration of keratin by alkalis. II., B., 640².

Bergmann, M., and Stern, F., transformations of peptide substances. VIII. Dehydrogenation of amino-acids, A., 743.

Bergmann, M., Stern, F., and White, C., transformations of peptide substances. XIII. Synthesis of dipeptides and their anhydrides, A., 1236.

Bergmann, M., and Zervas, L., aldehydic compounds of amino-acids, A., 603.

Bergolin-Werke W. van den Bergh, [paint and varnish] bases, (P.), B., 761.

Bergstrom, F. W., reactions of the type $\text{Cl}_2 + 2\text{KOH} \rightarrow \text{KCl} + \text{KClO} + \text{H}_2\text{O}$, A., 254.

polysulphides and polyselenides of lithium, sodium, and potassium, A., 256. solutions of the electronegative elements in liquid ammonia. I. Action of silicon, tellurium, arsenic, and a solution of sulphur in liquid ammonia on cyanides, A., 1113.

Berkhout, P. J. T. van, determination of dextrose, non-protein nitrogen, uric acid, and total phosphorus in normal blood of man in tropical regions and in the blood of birds suffering from avitaminosis, A., 85².

Berkman, S., and Zocher, H., optical anisotropy of coloured sols of sodium mercurisulphosalicylate, A., 1097.

Berl, E., drying wet fuels, (P.), B., 308. recovery of alcohol, ether, aldehydes, etc., from gases, (P.), B., 964.

Berl, E., and Bitter, J., viscose, B., 943.

Berl, E., and Burkhardt, H., rapid, dry method for the determination of carbon and hydrogen, A., 749. semi-micro-method for the determination of nitrogen, A., 749.

Berl, E., and Lange, A., viscose, B., 944.

Berl, E., and Pfannmiller, W., removal of printer's ink from old paper, B., 268.

Berl, E., and Schmid, W., Karwendel oil shale, B., 306. extraction of oil shales and lignites with tetralin, B., 652.

Berl, E. See also Andreas, K.

Berlande, A., action of halogens on acraldehyde in dilute aqueous solution; trihalogenated propionic acids, A., 47.

Berlin, D. W., and Aktiebolaget Ferrolegeringar, producing ferrochromium and other ferro-alloys, (P.), B., 756².

Berlin, H., identity of isomaltose with gentiobiose, A., 602. occurrence of gentiobiose in the products of the commercial hydrolysis of corn [maize] starch, B., 992.

Berliner, J. F. T., and May, O. E., vapour pressure. II. Mononitrotoluenes A., 1198.

Berlingozzi, S., and Di Mase, G., oil of *Salvia spinosa* from Cyrenaica, B., 887.

Berlingozzi, S., and Furia, M., resolution of α -bromo- α -valeric acid into its optical isomericides, A., 819.

Berlingozzi, S., and Mazza, F. P., hydrophthalides. I. Action of magnesium alkyl iodides on α^2 -tetrahydrophthalic anhydride, A., 835.

Berlowitz, M., use of metal filters for the removal of dust from air, B., 31.

Berman, H., identity of "iehnrite" and ludlamite, A., 709.

Berman, H. See also Larsen, E. S.

Berman, L., effect of a protein-free acid-alcohol extract of the parathyroid glands on the calcium content of the blood and the electrical irritability of the nerves of parathyroidectomised and normal animals, A., 320.

separation of an internal secretion of the parathyroid glands, A., 970.

Bermann, V., determination of the colour of malts, B., 170, 929.

Bernard, H. B., and Sinclair Oil and Gas Co., recovery of gasoline, (P.), B., 41.

gasoline-recovery apparatus, (P.), B., 700.

Bernard, H. C., overcoming plating troubles, B., 370.

Bernard, A., behaviour of the colloidal acetates of tetra- and penta-mercuri-acetanilide, A., 966.

Bernard, A., and Piacentini, G., new compounds of cobalt with nitrophenols, A., 721.

Bernard, G., action of ammonia on cotton cellulose, B., 151.

determination of the degree of swelling of cellulose by Schwalbe's hydrolysis number method, B., 399.

Bernard, K., [wood] boiling diagram for sulphite liquors containing magnesium, B., 871.

Bernard, K. See also Schwalbe, C. G.

Bernard, M. See Chem. Fabr. Ganff G.m.b.H.

Berner, E., heat of combustion of salicylic acid, A., 116.

Bernette, A., See Dupont, G.

Bernhard, A., and Beaver, J. J., electro-dialysis of human blood-serum, A., 960.

Bernhard, A. See also Manheims, P. J.

Bernhardt, F., present position of the basic hearth refining process in comparison with the Thomas process, B., 442.

Bernhardt, H., effect of white phosphorus on calcium metabolism, A., 1056.

Bernhardt, H., and Rabl, C. R. H., disturbance of the mineral metabolism and its effect on the action of white phosphorus, A., 1056.

Bernhardt, H., and Ucko, H., bromine content of the organism. II. Physiological bromine content of organs, A., 635.

Bernhardt, R., maturing of viscose, with special reference to colloid-chemical changes, B., 187.

Bernhauser, K., acid production by *Aspergillus niger*. I. Processes of acid production. II. Gluconic acid formation. III. Citric acid formation, A., 978.

Bernoulli, A. L., sliding scale colorimeter and determination of traces of ammonia, nitrite, lead, and iron, A., 1116.

Bernoulli, A. L., and Goar, A. S., reaction velocity and the influence of constitution in the benzoylation of monohydric phenols, A., 1108.

Bernstein, A. See Viskose A.G.

Bernstein, L. I. See Syrkin, J. K.

Bernzott, H. See Dilworth, O.

Berres, C. See Dilthey, W.

Berrigan, J. J., manufacture of fertilisers and stock foods, (P.), B., 171.

Berry, A. J., direct titration of thallous salts by potassium iodate, A., 376.

Berry, E. R., and General Electric Co., quartz working, (P.), B., 489.

Berry, G. A., feeding solids and semi-solids to chemical apparatus, (P.), B., 175.

Berry, H. R., conversion of hydrocarbons, (P.), B., 352.

Berry, H. R., and Dynamics Corporation of America, heat treatment [cracking] of hydrocarbons, (P.), B., 181.

Bersa, F., calcium carbonate in a group of sulphur bacteria, A., 1277.

Bert, L., syntheses in the *p*-cymene series from isopropyl alcohol. I. Syntheses of *p*-cymene, A., 56.

syntheses in the *p*-cymene series from isopropyl alcohol. II. Syntheses with magnesium *p*-tropropylphenyl bromide, A., 56.

syntheses in the *p*-cymene series from *tropropyl* alcohol. III. Syntheses by means of magnesium cuminal chloride, A., 255.

Bert, L., and Dorier, P. C., complete synthesis of thymol from isopropyl alcohol, A., 164.

true *o*-naphthylproplene, A., 391.

Bertels, G. F. See Martin, P. J.

Berthelmy, P., and De Montby, H., manufacture of aluminium alloy, (P.), B., 1018.

Berthelot, A., and Amouroux, G., antiseptic properties of crotonaldehyde, A., 766.

Berthelot, A., and Cradac, M., iodine value of commercial peptones, B., 964.

Berthelot, A., Ramon, G., and Amouroux, G., effect of oxygen on tetanus toxin, A., 1178.

Berthelot, C., purification of coal gas by the wet process, B., 36.

Berthelot, D., law of photochemical equivalence and place of the quantum theory in relation to the atomic theory and energetics, A., 584.

Berthelot, K. See Walbum, L. E.

Bertho, A., behaviour of hydrazoic acid and ammonium azide in benzene and *p*-xylene under pressure, A., 603.

Bertho, A. See also Curtiss, T.

Berthold, E. See Kalb, L.

Berthon, R., and Société du Film K.D.B., photographic film for colour photography, (P.), B., 997.

Berthoud, A., additive rule in mixed photochemical reactions, A., 485.

photochemical sensitisation, A., 583.

Bertolini, D., and Swiss Jewel Co., synthetically made precious stone, (P.), B., 126.

Bertram, A. See Badische Anilin- & Soda-Fabrik.

Bertram, S. H., Steur, J. P. K. van der, and Verhagen, F., determination of coconut oil in margarine, B., 140.

Bertrand, G., and Macleod, M., nickel and cobalt in the pancreas, A., 869.

influence of nickel and cobalt upon the action of insulin on the rabbit, A., 869.

influence of nickel and cobalt upon the action of insulin on the dog, A., 869.

amount of cobalt in organs of animals, A., 969.

nickel, cobalt, and diabetes, A., 971.

Beryllium Corporation of America, and Cooper, H. S., preparation of alloys [of beryllium and silver], (P.), B., 952.

Besemfelder, E. R., utilisation of the energy liberated during the oxidation of hydrogen compounds of sulphur, nitrogen, and phosphorus, to mineral acids, (P.), B., 320.

Besombe, A., determination of iron by the dichromate method, A., 377.

Best, C. H., effect of insulin on the dextrose consumption of perfused skeletal muscle, A., 546.

Best, C. H., Dale, H. H., Hoet, J. P., and Marks, H. P., oxidation and storage of dextrose under action of insulin, A., 870.

Best, C. H., Hoet, J. P., and Marks, H. P., fate of sugar disappearing under action of insulin, A., 870.

Best, C. H., and Marks, H. P., effect of insulin on the lactacidogen content of the skeletal muscles, A., 870.

Best, R. B., emulsifying or mixing apparatus [for preparing size for paper], (P.), B., 235.

Besta, A., apparatus for carbonising bituminous fuels, (P.), B., 232.

Bestuschev, M. See Sachanov, A.

Bethlehem Steel Co. See Kichline, F. O.

Betts, A. G., ceramic and refractory making process and material, (P.), B., 607.

refractory and ceramic process and materials, (P.), B., 607.

Bettzieche, F., hydroxyamino-acids, I., A., 155.

Bettzieche, F., and Ehrlich, A., action of Grignard reagent on amino-acids, VI. Decomposition of amino-alcohols by heat, A., 151.

action of Grignard reagent on amino-acids. VII. Deamination of β -amino- α -dibenzylethanol, A., 155.

action of Grignard reagent on amino-acids. VIII., A., 1234.

Beuschel, W. See Goldschmidt, S.

Beutner, R., reaction between serum and alkaloids, A., 1267.

Beveridge, J., and Beveridge, J. B., recovering sodium acid sulphite from waste liquors of sodium acid sulphite pulp process, (P.), B., 49.

Beveridge, J. B. See Beveridge, J.

Bevis, (Miss) J. F. See Wright, A. M.

Bewick, P. W. See Appleyard, K. C.

Beyerle, W. N., ore-grinding mill, (P.), B., 344.

Bezzsonoff, N., rapid preparation of the molybdo-phosphotungstic acid reagent for polyhydroxy phenols and vitamins, A., 722.

Bezzsonoff, N. See also Trusافت, G.

Bhalla, M. D. See Yajnik, N. A.

Bharadwaj, M. C. See Yajnik, N. A.

Bhatia, S. L. See Bhatnagar, S. S., and Yajnik, N. A.

Bhatnagar, S. S., and Bhatia, S. L., rates of evaporation of water adsorbed on metals and their oxides, A., 900.

Bhatnagar, S. S., and Lal, R. B., effects of polarised light on bacterial growth, A., 435.

Bhatnagar, S. S., Lal, R. B., and Mathur, K. N., effect of polarised radiations on animal metabolism, A., 863.

Bhatnagar, S. S., Prasad, M., and Singh, B., conductivity and surface tension of univalent salts of higher fatty acids in the molten state, A., 477.

Bhatnagar, S. S., and Sebagal, J. L., concentric coloured rings of the beetroot, and the Liesegang phenomenon, A., 904.

Bhatnagar, S. S., Yajnik, N. A., Prasad, M., and Ahmed, B., relation between the chemical constitution of organic liquids and the translucency of paper dipped in them, A., 901.

Bhatnagar, A. K. See Ghosh, S.

Bhopal Produce Trust, Ltd. See Fraymouth, W. A.

Biaggini, E., refrigerating plant, (P.), B., 729.

Bialkowski, S., device for the evaporation of solutions strongly acid with hydrochloric acid, A., 932.

Bialobiejski, T., true absorption of light, A., 451.

Biazzo, R., rapid determination of copper in preserved vegetable products, B., 382.

Bibescu, I. See Ionescu, A.

Bible, C. M., pipettes for potash work, A., 205.

Bibra, C. J. von. See Prutzman, P. W.

Bichowsky, F. R., preventing adherence of cast metal [steel] to the mould, (P.), B., 368.

Bichowsky, F. R., and Urey, H. C., possible explanation of the relativity doublets and anomalous Zeeman effect by means of a magnetic electron, A., 447.

Bichowsky, F. R. See also Weide, H.

Bickel, A., metabolism in arylaminos, A., 326.

Bickel, V. T., and French, H. E., *o*-naphthylcarbimide as a reagent for alcohols, A., 517.

Bickling, O. W. See Hamill, G. K., and Shaw, M. B.

Bicksel, J., test for iodate ion, A., 375.

Bidand, F., and Société Chimique des Usines du Rhône, producing arsenate of lime, (P.), B., 743.

Biddle, A., caoutchouc compositions, (P.), B., 716, 957.

Bidwell, C. G., crystalline and amorphous states in the alkali metals, A., 562.

thermal conductivity of lithium and sodium by a modification of the Forbes bar method, A., 1087.

Bidzinski, Z. See Chrzązcz, T.

Bied, J. See Soc. des Cimants Français.

Bidermann, H. See Briner, E.

Biegler, H., oxidising salt test and the intercrystalline corrosion of aluminium and its alloys, B., 921.

Bielenberg, W. See Walther, R. von.

Biemüller, J., surface energy of the alkali halides, A., 1056.

Bienfait, H., deflection potentiometer, A., 260.

Bierer, J. M., and Davis, C. C., economical use of reclaimed rubber as a substitute for new rubber, H., 452.

Bierich, R., and Kalle, K., malignant tumours. III. SH-SS content, A., 1169.

Bierich, R., and Rosenblom, A., conditions of formation of malignant tumours. I. Lactic acid content of tissues. II. Cytochrome in the tissues, A., 860.

Bierling, L. jun., manufacture of glue, gelatin, etc., (P.), B., 600.

Bierry, H. See Desgraz, A.

Biesalski, E., and Eck, H. ran, combination of light metals and their carbides with nitrogen and sulphur in molten potassium thiocyanate, A., 1218.

Bigelow, J. A. See Reynolds, H. H.

Biginelli, P., cause of "gout" disease, B., 302.

Bignami, G., synthesis of hippuric acid in the human body. II. Glycuronic acid in urine after administration of sodium benzoate, A., 90.

synthesis of hippuric acid in the human body. III. Diuresis after administration of sodium benzoate, A., 90.

Bigot, A., kaolins, clays; formation of coal-bearing argillaceous schists, A., 379.

apparatus for the rapid filtration of liquids, (P.), B., 472.

Bijsma, U. G., flavouring substances in foods. I. Effect of ethyl acetate and a few other substances on the nitrogen excretion in normal dogs and in partly thyroidectomised dogs. II. Effect of ethyl acetate and a few other substances on the rate of growth of rats. III. Thyroid of rats receiving aliphatic esters and essential oils by the mouth, A., 863.

Bijsvoet, J. M., Claassen, A., and Karsse, A., crystal structure of red mercuric iodide, A., 889.

Bilham, P. See Lampitt, L. H.

Billinger, R. D. See Babasianian, V. S., and Stoughton, B.

Billingham, *W. E.*, emulsification of tar, bitumen, creosote, petroleum, and heavy oils, (P.), B., 655.
manufacture of paints, (P.), B., 837.

Billner, *K. P.*, concrete material, (P.), B., 159.
[cellular] concrete, (P.), B., 193.

Billon, *P.*, reduction of oximes by means of sodium and absolute alcohol; resolution of the amines thus obtained into their optical antipodes by means of d-tartaric acid, A., 405.
zinc chloride compounds of oximes, A., 500.

preparation of γ -amino- $\beta\beta$ -diethylbutan-*a*-ol, (P.), B., 899.

Bills, *C. E.*, antirachitic substances. II. Action of *n*-butyl nitrite on activated cholesterol and vitamin-*D*, A., 437.
fat solvents, A., 671.
antirachitic substances. III. Catalytic formation of an antirachitic cholesterol derivative, A., 645.

Bills, *C. E.* and McDonald, *F. G.*, antirachitic substances. IV. Polymerisation of cholesterol, A., 981.

Biltz, *H.* and Hanisch, *H.*, hydroxonic acid, 5-aminohydantoin, and the attempted preparation of 8-alkylallantoins, A., 414.

Biltz, *H.* and Klein, *H.*, degradation of uric acid-glycol ethers by alkali hydroxide, A., 182.

Biltz, *H.* and Klemm, *W.*, 5-amino-1-hydroxy-1:5-dihydrouric acid and uric acid glycol, with a review of the corresponding ψ -uric acid derivatives, A., 962.

Biltz, *H.* and Lachmann, *F.*, allooxic acid, A., 1046.
salts of allooxic acid; systematic study of hydrates, A., 1047.

Biltz, *H.* and Schiemann, *G.*, preparation of parabanic acid, A., 622.
reaction of mesoxalic acid with carbamide, A., 739.
mechanism of the oxidation of uric acid, A., 731.

Biltz, *H.* and Slotta, *K.*, preparation of hydantoin, A., 1045.

Biltz, *H.* and Klemm, *W.*, conductivity and molecular state of fused salts, A., 667.

Biltz, *H.* and Mühlendahl, *E.* von, reduction of heavy metal sulphides by barium oxide, A., 136.

Biltz, *H.* and Specht, *F.*, molecular and atomic volumes. VIII. Metaheulandites, A., 110.

Biltz, *H.* See also Birk, *E.*

Binaghi, *R.* and Falqui, *P.*, roots of *Gentiana lutea*, L., B., 106.

Binaghi, *R.* and Romoli-Venturi, *D.*, Sardinian coals, especially those of the Gonnesa [Inglesias] field, B., 82.

Binapig, *J.* See I. G. Farbenind., A.-G.

Bincer, (Mle.) *K.* See Galecki, *A.*

Bind, *F.* See Funk, *H.* and Vortmann, *G.*

Bind, *K.*, development in bright illumination and daylight, (P.), B., 566.
photographic developer, (P.), B., 633*.

Bind, *W. H.*, treating salt solutions, (P.), B., 822.

Binder-Kotbra, *G.*, conversion of phenylglyoxal into inandelic acid by the ketone-aldehyde mutase of green plants, A., 1059.
fermentation of phenylglyoxalic acid, A., 1061.

desmutation of aldonol by *Bacterium ascendens*, A., 1062.

Bindi, *D.*, influence of insulin on liver glycogen, A., 1063.

Bindschedler, *E.*, Juer, *G.*, and Tubize Artificial Silk Co. of America, manufacturing artificial silk and other products from nitrocellulose, (P.), B., 661.

Bindschedler, *E.*, Rugeley, *E. W.*, and Tubize Artificial Silk Co. of America, manufacturing hydrogen sulphide, (P.), B., 126.

Bindschedler, *E.* and Tubize Artificial Silk Co. of America, manufacture of artificial silk from nitrocellulose, (P.), B., 48.

Binet, and Collazo, lactic acid of blood under respiration, A., 421.

Bing, *H. I.* and Heckscher, *H.*, fat-cholesterol content of the blood in obesity and myxedema, A., 89.

Bing, *J.*, reduction of poor oolitic iron ores, (P.), B., 329.

Bingham (Mts) *K. E.*, constitution and age-hardening of some ternary and quaternary alloys of aluminium containing nickel, B., 791.

Binks, *H. D.*, liquid air or other gas separator, (P.), B., 1000*.

Binks, *W.* See Dickson, *E. C. S.*

Binnie, *D.*, magnetic properties of permalloy, B., 278.

Binz, *A.*, sulphonyl compounds. XIV. Constitution of sulphonyl compounds, A., 1123.
preparation of colloidal metal solutions, (P.), B., 299.

Binz, *A.* and Räth, *C.*, production of heterocyclic compounds containing arsenic or antimony, (P.), B., 512.
production of iodised pyridine derivatives, (P.), B., 608.

Birch, *S. F.* and Norris, *W. S. G. P.*, petroleum. III. Acid sludge from refining of Persian kerosene. I. Aromatic hydrocarbons, B., 970.

Birchall, *W.*, centrifugal separator, (P.), B., 472.

Bircher, *L. J.* and Howell, *G. D.*, temperature coefficients of reference electrodes, A., 247.

Birkenthalb, *L.* and Kellermann, *K.*, pseudobulogens. II. (I) The fulminic residue, (II) Equilibrium between iodine, selenocyanogen, and the corresponding silver salts. (III) Polypseudoiodides, A., 30.

Birkenthalb, *L.* and Röhr, *W.*, modifying the brisance of explosives [azides], B., 254.

Birkner, *V.* See Paine, *H. S.*

Bircumshaw, *L. L.*, solubility of hydrogen in tin and aluminium at high temperatures, A., 341.
surface tension of liquid metals. I. Tin and lead, A., 895.

Bircumshaw, *L. L.* See Freudlich, *H.*

Birge, *R. T.*, band spectrum of nitrogen and its theoretical interpretation, A., 8.
law of force and size of diatomic molecules as determined by their band spectra A., 12.

energy levels of the nitrogen molecule, A., 104.
energy levels of the carbon monoxide molecule, A., 224.
structure of molecules, A., 337.

quantum theory of band spectra, A., 1192.

Birge, *R. T.* and Spomer, *H.*, heat of dissociation of non-polar molecules, A., 993.

Birk, *E.* and Biltz, *W.*, molecular and atomic volumes. IX. Hexahydrates of chromic and chromous chlorides, A., 110.
molecular and atomic volumes. X. Complex cobalt salts, A., 601.

Birkett, *C. H.*, stress-strain relationship of rubber under compression, B., 374.

Birkholz, *H. E.* See National Air Filter Co.

Biroseil, *D. M.* See Germania, *A. F. O.*

Birstein, *V.* See Freudlich, *H.*

Birtwell, (Mts) *C.*, Clibbens, *D. A.*, and Geake, *A.*, chemical analysis of cotton. XII. Hydrocellulose, B., 629.

Bisbee, *F. J.*, filter-press, (P.), B., 696, 808*.

Bischoff, *A.* See Mellet, *R.*

Bischoff, *F.*, Maxwell, *L. C.*, and Blatherwick, *N. R.*, Wyss chemical method for assay of insulin, A., 643.

Bischoff, *I.*, German oil of turpentine, B., 450.

Bischoff, *M. A.* See Mellet, *R.*

Bishop, *G.* and Brady, *O. L.*, oximes of 2:4-dinitrobenzil and the Beckmann change, A., 617.

Bishop, *G. H.*, Briggs, *A. P.*, and Ronzon, *E.*, body fluids of the honey-bee larva. II. Constituents of the blood and their osmotic effect, A., 191.

Bishop, *J. B.*, polarisation of X-rays, A., 1187.

Bishop, *R. O.*, banana fibre, B., 266.
chemical examination of fibre from the bark of terap, tutor, and baru, B., 266.

Bishop, *R. O.* See also Eaton, *B. J.*

Bissinger, *E.*, precipitation of dextrose by Falkowski and Van Slyke's methods, A., 443.

Bissinger, *E.*, and Lesser, *E. J.*, carbohydrate metabolism of the mouse after injection of sugar solutions and of insulin. III., A., 436.

Bistrzyczy, *A.*, and Risi, *J.*, action of various diamines on naphthalic anhydride, A., 67.

Bitter, *J.* See Berl, *E.*

Bittorf, *A.*, and Falkenhagen, *von*, effect of potassium thiocyanate on diastatic action, A., 1058.

Bituminous Sand Co. See McClave, *J. M.*

Bielobolski, *A.*, luminescence spectra of Geissler tubes. II., A., 109.

Bjerrum, *N.*, theory of the velocity of chemical reactions. A., 131.
discovery of aluminium, A., 378.
heat of dilution of a solution of ionic in the theory of Debye and Hückel; theory of heat effects in a dielectric, A., 476.
electrical forces operating between ions, A., 1101.

Björnästål, *Y.*, electric double refraction in colloids, A., 994.

Blaauw, *A. F. W.* See Waterman, *H. I.*

Black, *A.* See Steenbock, *H.*

Black, *D. H.*, β -ray spectrum of the natural *L*-radiation from radium-*B*, A., 6.
analysis of the β -ray spectrum due to the natural *L*-radiation of radium-*B*, A., 6.

Black, *J. M. A.* See Irvine, (Sir) *J. C.*

Black, *J. C.*, Rial, *W. D.*, and Howes, *R. T.*, treatment of petroleum products, (P.), B., 863.

Black, *J. C.* and Weir, *J. W.*, lubricating oils, (P.), B., 353.

Black, *J. C.* See also Weir, *J. W.*

Black, *J. W.*, freshly ground coffee and "blown" tins, B., 801.

Black, *R.* and Shaefer, *C. L.*, "atomised" coal for smelting non-ferrous metals, B., 328.

Blackadder, *T.*, and Robeson Process Co., tanning preparations [from sulphur-cellulose waste lye], (P.), B., 291.

Blackburn, *C. M.*, analysis of the "comet-tail" bands, A., 1079.

Blackburn, *C. M.* See also Lemon, *H. B.*

Blackburn, *H. W.* and Thomas, *W.*, manufacture of ammonia, (P.), B., 978.

Blakie, *A.*, measurement of [flow of] heat, (P.), B., 520.

Blagden, *J. W.* See Howards & Sons, Ltd.

Blagovestchenski, *A.*, effect of high concentrations of neutral substances on the action of peptase, A., 433.
synthetic action of plant proteases, A., 434.

Blair, *A.* See Blair, Campbell, and McLean, Ltd.

Blair, *E. W.* and Taylor, *R.*, distillation of aqueous formaldehyde solutions, B., 339.

Blair, *E. W.* See also Ledbury, *W.*

Blair, *J. S.*, mixed aquo-ammoniocarbonic acids. I. Ammonolysis to ammoniocarbonic acid, A., 277.
mixed aquo-ammoniocarbonic acids. II. Salt formation in liquid ammonia solution, A., 277.

Blair, Campbell, and McLean, Ltd., and Blair, *A.*, heating of vacuum pans, (P.), B., 425.

Blair, Campbell, and McLean, Ltd., and Phillips, *J. R.*, evaporating apparatus, (P.), B., 647.

Blair, Campbell, and McLean, Ltd., and Webster, *R.*, apparatus for heating and boiling liquids, (P.), B., 619.

Blaisdell, *H. W.*, rapid fine sand [water] filtration, B., 254.

Blaise, *E. E.* and Millot, *J.*, transposition of groups, A., 913.

Blake, *F. C.* See Phebus, *W. C.*

Blake, *J. T.* See Boggs, *C. R.*

Blake, *T. V.*, condensation and wet [gas] purification, B., 226.
washing or scrubbing coal or like gas, (P.), B., 654.

Blakley, *H.*, gas purification, B., 938.

Blakley, *J. F.*, gas washer and scrubber, (P.), B., 230.

Blanc, *L.*, magnetic oxide of chromium, A., 782.
changes in ferric, chromic, and aluminium oxides on ignition, A., 1205.

Blanc, *L.* and Chaudron, *G.*, transformation and oxidation of chromium sesquioxide, A., 372.

Blanchard, *A. A.*, valency of nitrogen and hydrogen, A., 662.

Blanchard, *A. A.* and Gilliland, *W. L.*, constitution of nickel carbonyl and the nature of secondary valency, A., 661.

Blanchard, *A. A.* See also Gilliland, *W. L.*

Blanchard, *K. C.* See MacInnes, *D. A.*

Blanchard, *J.*, ethers derived from $\beta\beta$ -dihalogenated isopropyl alcohols and halogenated propylene glycols, A., 1023.
synthesis of a new class of mixed formals, of the formula $OR\cdot CH_2\cdot O\cdot CH(CH_2X)\cdot CH_2\cdot X'$
(by additive reaction with epichlorohydrin), A., 1123.

Blanchard, (Mts) *M. S.* and Pickering, *S. F.*, normal densities of gases, A., 999.

Blanchet, *L.*, recovery of metals, especially iron and steel [from ores and scrap], (P.), B., 673.

Blanchet, *L.* and Société de Chimie et de la Catalyse Ind. Siege Social, oil-gas apparatus, (P.), B., 119.

Blanc, *E.*, determination of manurial requirements of soils by laboratory methods, B., 378.

Blanc, *E.* and Alten, *F.*, physiological importance of extractable nutrients; the determination of the manurial requirement of soils by chemical means, B., 70.

action of zeotokol [powdered dolerite] on plant growth, B., 70.

europophosphate of Dassag manure, B., 379.

vegetation experiments with sericite as a source of potassium, B., 641.

Blank, E., and Giesecke, F., distribution of calcium cyanamide [mixed] with soil, B., 102.

Blank, E., and Hahne, A., experiments with calcium nitrate, B., 379.

Blank, E., Passarge, S., and Rieser, A., crust soils, crust formation, and red soils, with special reference to the soil formation of Palestine, B., 681.

Blank, E., and Scheffer, F., Neubauer method and determination of the nitrogen requirements of soils, B., 139.
"Asahi-Promocloid," B., 601.

Blank, E., protecting woollen goods and similar material from attack by moth, (P.), B., 871.

Blaney, L., diazotisation of picramide, A., 62.

Blaringham, L. F., impregnation of wood, (P.), B., 91.

Blaschko, H., mechanism of the inhibition of the respiration model by hydrogen cyanide, A., 1012.

Blatherwick, N. R., Bell, M., Hill, E., and Long, M. L., excretion of sugar in normal urine, A., 424.

Blatherwick, N. R. See also Bischoff, F.

Blawknos Co. See McArthur, C. D.

Blaydon Manure and Alkali Co. (1877), Ltd. See Hill, B. P.

Blazey, C., determination of cadmium in copper, A., 491.

Blechta, F., nitrous esters of cellulose, B., 306.

Bleeker, (Miss) C. E., flame spectra and chemical reaction, A., 657.

Bleemster, A. V., and Homer Laughlin China Co., continuous compartment kiln (P.), B., 879.

Bleyer, B., iodine as a biogenic element, A., 638.

Bleyer, L., action of metallic salts on the capacity of blood to decompose hydrogen peroxide, A., 86.

Blieke, F. F., formation of triphenylmethyl in the ethyl acetoacetate synthesis, A., 508.

Bright, R. R., paper-making machinery, (P.), B., 86*.

Blinov, V. See Predvoditelev, A.

Blish, M. J., and Sandstedt, R. M., preparation of wheat gliadin, B., 894.

Bliss, S., site of ammonia formation; rôle of vomiting in elimination of ammonia, A., 428.

Blix, G., nephelometry of blood lipins, A., 412.

Bloch, B., and Schaaf, F., pigments, A., 87.

Bloch, B. M., estimation of the duration of the emission of light by hydrogen positive rays from their behaviour on passing out of an electric field into free space, A., 330.

Bloch, E. See Bloch, L.

Bloch, L., and Bloch, E., second spark spectrum of iron, A., 650.

Bloch, L., Bloch, E., and Déjardin, G., spark spectra of neon, A., 329, 706, 874.

Block, B., temperature of vapour given off by a solution, A., 474.

Bloman, A. See Backer, H. J.

Blom, A. See Szamatolski, H.

Blom, A. V., lead suboxide as pigment, B., 247.
"leading" by [lead suboxide] paint, B., 760.
optical examination of pigments, B., 760.

Blom, J., sensitive and specific reactions for nitrate and hydroxylamine, A., 375.

Blomberg, H. See Allgemeine Elektricitäts-Gesellschaft.

Blood, P. T. See Kraybill, H. R.

Bloomfield, J. J. See Sayers, R.

Bloor, W. R., unsaturated fatty acids in tissues. I. Ox heart-muscle, A., 752.

Blowski, A. A., and Bon, J. H., decolorising carbons [for sugar refining], B., 294.

Blowski, A. A., and Holven, A. L., hydrogen-ion concentration as a basis of [sugar] refinery alkalinity control, B., 169.

Blith, O., [behaviour of] colloids under an alternating current, A., 23.
colloidal particles in alternating fields of various frequencies, A., 576.

Bühl, O. See also Gicklhorn, J.

Blümner, E., continuous distillation of tars and oils, (P.), B., 264*.
destructive distillation of tars and oils, (P.), B., 865.

Blum, G. R., recovery of sugar from molasses, (P.), B., 294.

Blum, I. See Danalla, N.

Blum, L., Delaville, M., and Jones, C. M., permeability of blood-corpuses, A., 421.

Blumberger, J. S. P., decomposition of diazo-compounds under the influence of copper, A., 164.
mechanism of coupling, A., 391.

Blume, A., grinding discs for use in grinding mills, (P.), B., 648.

Blumenberg, H., jun., and Stockholders' Syndicate, process of treating phosphate material, (P.), B., 717.
phosphate fertilisers, (P.), B., 764.

Blumenfeld, J., and Mayer, M., titanium pigments, (P.), B., 680.

Blumenfeld, J. See also Weizmann, C.

Blumenstock, A., preparation of stearolactone, A., 597.

Blumenstock, E. See Pollak, J.

Blumer Chemische Fabrik, J., purification of spirit-soluble Manila copal, (P.), B., 288.

Blumfeldt, A. See Soc. of Chem. Ind. in Basle.

Blunt, D. L. See Woodman, H. E.

Blunt, K. See Chaney, M. S.

Blyth, C. E. See Herbert, A.

Boake, Roberts & Co., Ltd., A. See Silberrad, O.

Boas, F., hygrometer; effect of neutral salts on cells, A., 1276.

Boas, M. A., antirachitic value of winter spinach, A., 437.

Boberg, T. See Söderström, O.

Bobko, E. W., and Askinasi, D. L., determination of the adsorption capacity and degree of saturation of soils, B., 415.
determination of absorptive capacity and degree of unsaturation of soils, B., 1025.

Bobko, E. W., Golubev, B. A., and Tulin, A. F., injurious action [on soils] of large applications of lime, B., 1024.

Bobrovnikoff, N. T. See Lemon, H. B.

Bobtelaky, M. See Kohlschütter, V.

Boby, W., & Co., Ltd. See Froude, R. H.

Boby, W. V. See Froude, R. H.

Bocchi, C. See Rossi, G.

Bock, A., determination of chloride in commercial alkali cyanides, B., 582.

Bock, J. C., Schleider, H., and Gilbert, M., blood sugar. II. Initial rise, A., 968.

Bock, J. C. See also Gilbert, M.

Boekmühl, M. See Farbw. vorm. Meister, Lucius, & Brüning.

Boedansky, M. See Hendrix, B. M.

Boedansky, O. See Losb, Leo.

Boedestolm, A. See Borsche, W.

Boedestolm, M., mechanism of photochemical reactions, A., 585*.
velocity of [gas] reactions involving atoms, A., 690.

Boedestolm, M., and Günther, P. [with Hoffmeister, F.], thermochemistry of gas reactions. I. Heat of formation and the conditions of existence of carbon tetrachloride, A., 910.

Boedestolm, M., and Jung, G., dissociation of the hydrogen molecule, A., 680.

Boedestolm, M., and Lichneweg, F., decomposition of hydrogen iodide in light, A., 484.

Boedestolm, M., and Schmidt, Albert, equilibrium $I_2 + Br_2 \rightleftharpoons 2IBr$, A., 1100.

Boeffors, S., isomeric benzaldoxyphenylhydrazones, A., 613.
electrometric titration of phosphates, A., 1018.
electrochemistry of beryllium [and magnesium], A., 1212.

Boehler, J. See Kuchler, L.

Boedan, W. L. See Gettings, S. S.

Boednár, J., phosphorus metabolism of higher plants. I. Enzymic conversion of inorganic phosphoric acid into organic combination, A., 439.

Boednár, J., and Ferenczy, J., instability of atropine sulphate, A., 183.

Boednár, J., and Roth, L. E., catalytic action of copper ions in the evolution of hydrochloric acid [from chloride solutions evaporated with sulphuric acid], A., 1011.

Boednár, J., Szepesy, C., and Ferenczy, J., acetaldehyde fixation in alcoholic fermentation of higher plants, A., 438.

Boednár, J., and Terényi, A., action of mercury compounds on rust spores of wheat, A., 441.
action of copper compounds on "stinking smut" of wheat, B., 26.
determination of toxic substances in insecticides. I. Volumetric determination of thallium in "Zello" preparations, B., 997.

Boednár, J., and Villányi, I., thermostability of plant amylase zymogens, A., 541.

Boed, R. von, determination of total iodine in organs, blood, and urine, A., 328.

Boed, R. von, and Liebmann, S., calcium-ion concentration of the blood in puerperal eclampsia, A., 89.

Boed, R. von. See also Gremels, H.

Boeck, P. A., and Celite Co., treating filtration residues for re-use, (P.), B., 256.

Böeseken, J., compounds containing an atom of quinquevalent boron and their optical activity, A., 283.
influence of some "polyols" on the electrical conductivity of boric acid, A., 910.

Böeseken, J. [with Dommissé, J. P.], action of trimethylglycerose on boric acid and on acetone in connexion with the configuration of the sugars, A., 818.

Böeseken, J., and Coops, J., jun., use of boric acid for determining the structure of various organic compounds. I. Dissociation constants of various acids in the presence of boric acid, A., 681.

Böeseken, J., and Gelissen, H., qualitative resemblance between the velocity of hydration of acid anhydrides and the velocity of hydrolysis of diacyl peroxides, A., 166.

Böeseken, J., and Hermans, P. H., preparation of glycerol monochlorhydrin, A., 1122.

Böeseken, J., and Julius, (Mlle) A., configuration of inositol and of quercitol, A., 818.

Böeseken, J., and Meuwissen, J. C., effect of hexahydroxybenzene, tetrahydroxy-*p*-benzoquinone, and triquinoyl on the conductivity of boric acid, A., 801.

Böeseken, J., and Reynhart, A. F. A., action of benzoyl peroxide on benzene at low temperatures in presence of anhydrous metal chlorides, A., 1037.

Boegehold, A. L. See Williams, H. M.

Boehm, errors in electro-analysis, A., 374.

Böhm, B., dyeing apparatus [for hat bodies], (P.), B., 786*.

Böhm, E., and Bonhoeffer, K. F., reactions of active hydrogen with gases, A., 588.

Böhm, E. See also Sabatitschka, T.

Böhm, J., hydroxides of aluminium and iron. I., A., 113.
incandescence of certain metallic oxides, A., 113.

Böhm, K. See Kraup, S.

Böhm, T. See Rosenmund, K. W.

Böhm, W. See Schümann, E.

Boehringer & Soehne, C. F., oxidation of organic substances and the preparation of salt mixtures containing chromate and dichromate, (P.), B., 434.
preparation of double compounds from aliphatic amino-acids and inorganic alkali salts [phosphates], (P.), B., 464.

Boehringer & Soehne, C. F., and Rothmann, A., derivatives of aminobenzoic acids, (P.), B., 898.

Boehringer & Soehne, C. F., Rothmann, A., and Stein, H., preparation of 4-hydroxydiphenyl-4'-arsinic acid, (P.), B., 900.
purification of bisalkylxanthens, (P.), B., 902.

Boehringer Sohn, C. H., and Dengler, O., production of pure lecithin, (P.), B., 692.

Boehringer Sohn, C. H., and Rahn, F., baking powders, (P.), B., 297.
production of glucosides of *Digitalis*, (P.), B., 720.

Boehringer Sohn, C. H. See also Thiele, H., and Wieland, H.

Boeker, V. W., enamel clays, B., 917.

Böniger, M. See Chem. Works, formerly Sandoz.

Boericke, J. J., producing molybdenum and vanadium alloys, (P.), B., 63.

Börner, F., unsoundness of a large chlorine tank at the Wilhelmsburg tin works, B., 235.
preparation of antimony regulus, B., 244.

Börner, K. See Wieland, H.

Börnstei, K., mineral metabolism of the skin, A., 862.

Boertlein, J. C., and Grasselli Chemical Co., apparatus for analysing [oleum] by heat of reaction, (P.), B., 875.

Boertlein, J. C. See also Grasselli Chemical Co.

Boettcher, E. See Schopf, C.

Böttcher, K. See Farbw. vorm. Meister, Lucius, & Brüning.

Böttger, K., and Böttger, W., high values for potassium dichromate in determinations of thiosulphate, A., 1221.

Böttger, W. See Böttger, K.

Boez, L., peptone culture medium for *Bacillus tuberculosis*, A., 1062.

Boegart, E. See Mund, W.

Bogendörfer, L., and Halle, B., reversible haemolysis, A., 86.

Boegert, M. T., dyestuff intermediates, (P.), B., 433.

Bogert, M. T., and Allen, R. W., thiazoles. XI. Synthesis of 2-p-aminophenyl-5-methylbenzthiazole and incidental compounds: isomerides of dehydrothiophenol-p-toluidine and of chloramine-yellow, A., 743.

Bogert, M. T., and Andersen, C. N., selenium organic compounds. VI. Bromine, sulphur, and mercury derivatives of 2:4-diphenselenophen and experiments with some related compounds, A., 311.

Bogert, M. T., and Corbitt, H. B., thiazoles. X. Synthesis of some 1-phenylbenzthiazole-scarinic acids, A., 28.

Bogert, M. T., and Stull, A., thiazoles. VII. Behaviour of α -aminophenylmercaptoanil with aldehydes, ketones, and *gem*-dihalides; synthesis of benzthiazoles, A., 183.

Bogert, M. T., thiazoles. VIII. Condensation of α -aminophenyl mercaptoanil with α -aminophenyl disulphide with acid chlorides, anhydrides, and esters, A., 310.

odour and chemical constitution in the benzthiazoles, B., 384.

Boggiiano-Pico, L., apparatus for treating organic residues, (P.), B., 902.

Bogio-Lera, E. See Plutti, A.

Boggs, C. R., and Blake, J. T., absorption of water by rubber, B., 374.

Bogin, C., and Commercial Solvents Corporation, purification of butyric aldehyde, (P.), B., 28.

polymerisation of butaldehyde, (P.), B., 465.

Bogin, C. See also Brown, B. R., and Legg, D. A.

Bogitich, B., iron-iron sulphide alloys, B., 194.

composition of copper mattes, B., 281.

granulation of slags and metals, B., 547, 883².

rôle of sodium sulphate in the refining of mattes, B., 547².

removal of iron from copper and nickel mattes, B., 634.

Bogomolova, M. I. See Igarischev, N. A.

Bogros, A., resonance of lithium vapour, A., 874.

Bogue, R. H. See Hansen, W. C., and Lerch, W.

Bohn, G. See Drzewina, A.

Bole, H. See Knoll & Co.

Boinot, F., and Commercial Solvents Corporation, manufacture of *n*-butyl alcohol, (P.), B., 211.

Bois, E. See Dhérit, C.

Boitavel, G., corresponding states and surface phenomena, A., 343.

Boivin, A., micro-determination of the blood urea, A., 1067.

Bolam, T. R., and MacKenzie, (Miss) M. R., influence of lyophilic colloids on the precipitation of insoluble salts, gelatin, and silver chromate. I. and II., A., 678, 1005².

Boldt, W. See Sablitschka, J.

Boldyreva, A. K., crystallographic investigation of tscheffinite, A., 266.

Boller, W., determination of traces of water in mineral oils, B., 777.

Bolinger, A., relation of phosphate metabolism to anaesthesia, A., 1172.

Bollier, A. See also Hartman, F. W.

Bollman, J. L., Mann, F. C., and Magath, T. B., physiology of the liver. XII. Muscle glycogen following total removal of the liver, A., 637.

physiology of the liver. XV. Effect of removal of the liver on deamination, A., 1272.

Bollman, J. L. See also Mann, F. C., and Walters, W.

Bollmann, H., removing phosphatides from vegetable oils, (P.), B., 136.

apparatus for distilling fatty acids, (P.), B., 713.

de-acidification of oils and fats, (P.), B., 987.

purification of phosphatides [from soybean], (P.), B., 993.

evaporating organic solvents, (P.), B., 999.

improving the durability of liquid vegetable oils, (P.), B., 1020.

Bollmann, H., and Foster, M. P., increasing the durability of pure salad or sweet oils, (P.), B., 414.

Bolotina, A. See Terentiev, A. P.

Bolton, E. R., and Williams, R. A., test for Chinese wood [tung] oil, B., 712.

Bomhard, H. von. See Schlubach, H.

Bon, J. H. See Bleowski, A. A.

Bond, P. A., and Beach, H. T., systems formed by certain inorganic compounds with liquid sulphur dioxide, A., 344.

Bonde, J. See Pringsheim, H.

Bondi, H., Bondi, S., and Neurath, B., extraction of tin from alloys containing lead by electrolytic means, (P.), B., 985.

Bondi, S. See Bondi, H.

Bone, W. A., catalytic combustion. III. Influence of steam on the catalytic combustion of carbon monoxide, A., 1109.

treatment of certain fuels [lignite] to improve their calorific value, (P.), B., 780².

combustion of carbonic oxide, B., 809.

Bone, W. A., and Andrew, G. W., catalytic combustion. I. Union of carbon monoxide and oxygen in contact with a gold surface, A., 33.

catalytic combustion. II. Union of carbon monoxide and oxygen in contact with nickel, copper, and their oxides, A., 250.

Bone, W. A., Fraser, R. P., and Newitt, D. M., combustion of well-dried carbon monoxide and oxygen mixtures, II., A., 480.

Bone, W. A., Newitt, D. M., and Townsend, D. T. A., gaseous combustion at high pressures. VI. Explosion of argon and helium-diluted "knall-gases," A., 480.

Bone, W. A., and Quarenden, R., chemistry of coal. IV. Oxidation of the residue from the benzene-pressure-extraction process, B., 305.

Bone, W. A., and Weston, F. R., combustion of well-dried carbon monoxide and oxygen mixtures, I., A., 480.

Boner, J. See Briner, E.

Bongrand, J. C., rubber and the rubber industry, B., 101².

Bonham, L. J., production of propylene, A., 1022.

Bonhoeffer, K. F., properties of active hydrogen, A., 38.

Bonhoeffer, K. F., and Loeb, S., formation of hydrogen peroxide from electrolytic gas by optically-excited mercury atoms, A., 683.

Bonhoeffer, K. F., and Steiner, W., absorption spectrum of hydrogen iodide in the ultra-violet, A., 991.

Bonhoeffer, K. F. See also Boehm, E.

Bonhôte, G. See Society of Chem. Ind. in Basle.

Bonifaz, G., determination of lactic acid in wine, B., 603.

Bonino, G. B., spectrochemistry in the infra-red. X. Influence of intermolecular action on the form of infra-red absorption bands in liquids. XI. Double band of alcohols at 3.0-3.4 μ . XII. Form of the bands of alcohols in relation to the number and position of hydroxyl groups in the molecule. XIII. Absorption coefficients relative to CH for bands of alcohols, A., 775.

factors determining solubility, A., 1208.

Bonnard and Dandurand, analysis of commercial magnesium, B., 710.

Bonnell, D. G. R., and Jones, W. J., equilibrium between ethyl alcohol and the alkali and alkaline-earth salts. I., A., 357.

Bonner, W. D., and Yost, D. M., determination of sulphites and of ferrous iron, A., 261.

Bonnet, C., Bonnet, G., and Bonnet, F., machine for mercerising skins of thread, (P.), B., 125².

Bonnet, F. See Bonnet, C.

Bonnet, G. See Bonnet, C.

Bonnet, J. See Courtot, C.

Bonnet, R., Duquenois, P., and Vincent, G., energetics of growth. VII. Efficiency of various forms of nitrogen for the growth of micro-organisms, A., 1178.

Bonnet, R. See also Terroine, F.

Bonnier, C., ammonium carbonates, A., 370.

Bonnot, L. C., Barker, W. M., and Bonnot Co., pulverising mill, (P.), B., 695.

Bonnot Co. See Bonnot, L. C., and Sherban, D. V.

Bontempi, L. A., absorption spectra of morphine solutions in the ultra-violet, A., 223.

Book, G., and Eggert, J., photo-chlorination of toluene, A., 827.

Booksh, G. W. jun., dehydrating plant, (P.), B., 649.

Boone, C. E., and Newman, J. R., effect of heat, generated during stressing, on the tensile properties of rubber, B., 597.

Boone, F. H. See Orr, W. J.

Boord, C. E. See Charch, W. H., and Smith, A. W.

Boorne, W. H., treatment of bones for the production of bone meals, (P.), B., 989.

Boorne, W. H., and Budde, C. C. L. G., resinous compositions suitable for building purposes, (P.), B., 374.

Booth, G. W., tunnel kiln, (P.), B., 580.

Booth, H. S., and Schreiber, (Miss) N. E., determination of traces of mercury. I. Sensitive qualitative test for mercury, A., 40.

Booth, H. S., Schreiber, (Miss) N. E., and Zwick, K. G., determination of traces of mercury. II. Determination of mercury in presence of organic matter, A., 929.

Booth, H. S. See also Germann, A. F. O.

Booth, W. J., grinding or crushing machines, (P.), B., 695.

Booy, J., and Dienske, J. W., 6-chloro-(bromo-)1-hydroxy-1:2:3-benztriazole, A., 848.

Booze, M. C., and Norton Co., ceramic safety tile, (P.), B., 930.

Borax Consolidated, Ltd. See Kelly, A.

Borchardt, W. O., and New Jersey Zinc Co., treatment of minerals, (P.), B., 674.

Borchers, H. See Fricke, R.

Borchers, W. See Stimson, R. W.

Bordas, F., and Touplain, F., pure neutral distilled water [for biological purposes], A., 588.

Bordas, F. See also D'Arsonval.

Borden, J. F. See Oliver, E. L.

Borel, C. E. See Perrier, A.

Borgeaud, P. See Kehrmann, F.

Borgert, H., and Keitel, K., vaso-constrictor substances of blood-serum, A., 1051.

Borglin, J. N. See Benson, H. K.

Borgwardt, E. See Chem. Fabr. aul Aktien (vorm. E. Schering).

Borinski, P., reagent for detection of peroxodase in milk, II., 118.

Bormann, E., influence of melting scrap on the working of the blast furnace and the economy of cast-iron production, B., 130.

Bormuth, C. See Schaefer, C.

Born, J., and Ivánovics, G., action of various substances, especially of insulin, on cell respiration, A., 869.

Born, M., quantum mechanics of collisions, A., 1073.

Bornate, G. See Ageno-Valla, E.

Borne Scrymmer Co., and Smith, R. B., conditioning of raw cotton stock, (P.), B., 626.

Bornstein, A., and Rüter, E., effect of alkaloids and salts on vital staining. I. Studies with living tissue, A., 316.

Bornstein, A. See also Rüter, E.

Borntrager, A., organic acids of tomatoes, particularly citric acid, B., 105.

Borrel, C. See Cornubert, R.

Borsbach, E. See Chem. Fabr. Griesheim-Elektron.

Borsche, W., and Bodenstein, A., hydridene. III., A., 1133.

Borsche, W., and Feske, B., β -polynitroaryllhydroxylamines. III., A., 605.

β -polynitroaryllhydroxylamines. IV. 4:6-Dinitro-1:3-dihydroxylaminobenzene, A., 605.

Borsche, W., and Frank, R., tetrahydro-1:4-pyrone. IV., A., 409.

constitution of the bile acids. IX. Catalytic reduction of ketone acids of the bile acid group, A., 1140.

Borsche, W., and Fritzsche, A., isatin and related compounds. VII. Oximino-acetanilide, A., 393.

Borsche, W., and Trautner, W., dinitro-s-trihydrazinobenzene and some other derivatives of s-trichlorodinitrobenzene, A., 390.

Borsche, W., and Walter, C., syntheses of phenolic ketones by Friesch's method. I. "Hydroxybenzals," A., 515.

Borsok, H., and Wasteneys, H., interaction of free amino-nitrogen and dextrose, A., 313.

Boruff, C. S. See Buswell, A. M.

Borzykowski, B., washing artificial fibres wound upon bobbins, (P.), B., 152.

Bosanquet, C. H., bending of crystals, A., 115.

Bosart, L. W. See Robbins, H. B.

Bose, D. M., magnetic evidence of the distribution of electrons in the inner M_{1s} and M_{3s} levels in atoms of the elements of the first transition group, A., 106.

valency theories and the magnetic properties of complex salts, A., 111.

magneton number in complex compounds of some paramagnetic elements, A., 114.

irregularity of the $K\alpha$ doublets in the elements of lower atomic numbers, A., 650.

Bose, M. N. See Annett, H. E.

Bose, P. K., thiodiazines. III. Hydroxythiodiazines, A., 1159.

Bose-Ray, K. C. See Ray, P. C.

Bose, P., composition of blood-serum and its significance in the action of poisons, III. Action of ether on serum, A., 1057.

Bosse, P., and Handovsky, H., composition of blood-serum and its significance in the action of poisons. II. Characterisation of the protein fractions of normal serum by viscosity, A., 1057.

Bosse, P. See also Handovsky, H.



Bosshardt, E., open hearth furnaces, (P.), B., 411.
manufacture of steel, (P.), B., 883.

Bossière, C. G., and Zanicolli, H., separating the components of alloys, (P.), B., 590.

Bossière, G., precipitation of copper from impure solutions of copper sulphate by electrolysis, (P.), B., 548.

Bossini, R. F. See Anderson, A. E.

Bostrom, S. See Hock, L.

Boswell, R. O. See Stoney, G. G.

Bowell, M. C., and Dilworth, H. M., mechanism of catalysis by aluminium oxide, A., 134.

Bowsworth, A. W., and Chrysler, L. H., treating milk, (P.), B., 106.

Bottella, S. G., expression of equations of chemical actions as functions of time, A., 1009.

Bottiger, O., analytical use of the difference in the ease of oxidation of organic substances, A., 967.

Bottini, E., "promoloid asahil" [colloidal magnesium silicate], B., 641.

Bottoms, R. R., extraction of helium from gases, (P.), B., 238.

Boucher, A. See Boucher, J.

Boucher, J., and Boucher, A., glass-making furnaces, (P.), B., 668*.

Boucher, P. E., mobility of negative ions in petroleum, hydrogen, and hydrogen-chlorine flames, A., 105.

Bouckaert, J. P., determination of hydrogen carbonate in small amounts of serum, A., 1067.

Bouffard, E. See Ventre, J.

Bougaud, J., α -hydroxy- γ -phenylcrotonamide; an example of an ether of a ketone hydrate, A., 167.

Boughton, W. A. See Dawes, C. L.

Bonis, M., synthesis of Δ^{α} -pentadiene, A., 495.
allenic hydrocarbons, A., 935.

Boulard, method of arresting fermentation, particularly in the case of liquids containing alcohol and sugar, and of rendering such liquids non-fermentable, A., 867.

Boulois, J., transformations of aluminium-bronzes, B., 933.

Bouma, T. See Snoek, J. L.

Bouman, M. P. A. See Want, D. van der.

Bourget, P., determination of atropine, B., 293.

Bourcet, P. See also Chovalier, J. M. A.

Bourdais, M. L. J. See Cailliet, E. L. R.

Bourgeaud, M., electrometric study of the allotropic forms of mercuric sulphide, A., 803, 1196.

Bourgeaud, M. See also Etienne, G.

Bourgin, G. D. See Kemble, E. C.

Bourgois, L. G., acetylation of fatty and other substances [preparation of resinous substances], (P.), B., 288.

Bourguet, M., and Yvon, J., synthesis of some *cis*-ethylenic compounds, A., 269.

Bourguignon, M., and Société du Feutre, lime treatment of skins, (P.), B., 640*.

Bourion, F., and Rouyer, E., quantitative study of the association of mercuric chloride, A., 796.
ebullioscopic determination of the equilibrium constant relative to the formation of complexes with mercuric cyanide, A., 1005.

Bourne, W., effects of acetaldehyde, ether peroxide, ethyl mercaptan, ethyl sulphide, and dimethyl, methyl ethyl, and diethyl ketones when added to anaesthetic ether, A., 1173.

Bourne, W., and Hewitt, A. E., decorating earthenware and like articles, (P.), B., 747*.

Bourquin, H., and Laughton, N. B., factors influencing the excretion of carbamide. II. Diuresis and caffeine, A., 636.

Boutaric, A., and Corbet, S., critical solution temperature of acraldehyde and water, A., 1001.

Boutaric, A., and Manière, (Mme.) Y., influence of hydrogen-ion concentration on the speed of flocculation of negative colloids, A., 123.

Boutaric, A., and Perreau, (Mlle.) G., influence of some stable colloids on the flocculation of colloidal suspensions, A., 576.
existence of two regions of instability in the coagulation of certain suspensions by electrolytes with ter- and quadri-valent cations, A., 906.

Boutaric, A., and Semelé, C., influence of surface tension of colloidal solutions and suspensions on their stability, A., 1202.

Bony-Maatschappij Arina, recovery of iodides from iodine adsorbed by charcoal, (P.), B., 783.

Bouyoucos, G. J., do colloids exist as a coating round the soil grains? B., 762.

Bouzin, O., tubular mills for grinding or crushing, (P.), B., 520.

Boving, H., and Western Electric Co., forming metallic compositions [alloy filaments], (P.), B., 133.

Bowen, F. P. See McAulay, A. L.

Bowen, A. R., and Nash, A. W., thermal decomposition of cellulose and lignin in presence of catalysts and hydrogen under pressure, (P.), B., 474.
thermal decomposition of coal in presence of catalysts and under hydrogen pressure, B., 905.

Bowen, A. R., Shatwell, H. G., and Nash, A. W., thermal decomposition of cellulose under hydrogenation conditions, B., 35.

Bowen, E. J., dissociation theory and photochemical thresholds, A., 585*.

Bowen, E. J., and Watts, H. G., photolysis of acetaldehyde and of acetone, A., 808.

Bowen, I. See Edwards, E.

Bowen, I. S., and Ingram, S. R., wave-length standards in the extreme ultra-violet spectra of carbon, nitrogen, oxygen, and aluminium, A., 1070.

Bowen, I. S., and Millikan, R. A., stripped oxygen, O VI, the pp' -group in O V, and new aluminium lines in the extreme ultra-violet, A., 446.
series spectra of beryllium, Be I and Be II, A., 985.
ionisation potential of O II, A., 1073.

Bowen, N. L., properties of ammonium nitrate. I. Metastable Inversion. II. System ammonium nitrate-ammonium chloride. III. System ammonium nitrate-ammonium sulphate, A., 707.

Bowen, N. L., and Wyckoff, R. W. G., petrographic and X-ray study of the thermal dissociation of dumortierite, A., 595.

Bowen, N. L. See also Wyckoff, R. W. G.

Bowes, E. A. See Martin, G.

Bowker, R. C., and Geib, M. N. V., comparative durability of chrome- and vegetable-tanned sole leathers, B., 334.

Bowles, T. H., and Hirst, J. F., analysis of Prussian blues, B., 679.

Bowman, J. J. See Fulton, H. R.

Bowman, S. See Houghton, C. M.

Boyd, D. R., and Smith, F. J., formation of phosphinic acids from triarylmethoxy-phosphorus dichlorides [dichlorotriarylmethoxyphosphines], A., 1161.

Boyd, F. R. C. See Aktiebolaget Separator.

Boyd, J. D., Hines, H. M., and Leese, C. E., response to continuous intravenous injection of large amounts of dextrose, A., 861.

Boyd, J. I. See Roe, J. H.

Boyd, R. A. See Jauncey, G. E. M.

Boyd, T. A. See Lovell, W. G.

Boyd, T. E., Austin, W. C., and Ducey, E. F., attempts to control parathyroid tetany by oral administration of ammonium chloride, A., 800.

Boyd, E. A. See Fiske, C. H.

Boyer, M. W., and Buss, J., measurement of surface temperatures. I. Portable thermocouple device compensated for heat losses, B., 617.

Boyer, S., gallium-in-quartz thermometer graduated to 1000°, B., 79.

Boyer, S., and General Electric Co., refining gallium metal, (P.), B., 412.

Boyle, C. See Reilly, J.

Boyle, M. See Hancock, W. T.

Boynton, C. W., process of making vesicular products [building materials], (P.), B., 489*.

Bozza, G. See Cambi, L.

Braback, J., cylindrical dryer for low-temperature drying, (P.), B., 935.

Brace, P. H., and Westinghouse Electric and Manufacturing Co., non-magnetic steel wire, (P.), B., 96.
alloy of tantalum, (P.), B., 711.

Bracelin, P., period of decay of radium-B and radium-C, A., 553.

Brachmann, W. See Rupp, E.

Brackett, P. S., and Snoddy, L. B., mechanical aspects of the Bohr atom, A., 1078.

Bradfield, R. See Miller, M. F.

Bradley, A. J., and Oillard, E. F., allotropy of chromium, A., 112.

Bradley, A. J., and Thewils, J., structure of γ -brass, A., 1084.

Bradley, A. J. See also Müller, Heinz.

Bradley, C. E. See Whitelsey, T.

Bradley, J. See Tapsell, H. J.

Bradley, L., and McKeever, E. P., manufacture of cellulose, (P.), B., 153.
treatment of black liquor [from soda-cellulose manufacture], (P.), B., 153.
production of pulp, (P.), B., 316.
manufacture of alkali carbonates, (P.), B., 321.
production of pulp and other products from wood, (P.), B., 533.

Bradley, M. J., Corbin, R. M., and Floyd, T. W., oxygen bomb method for sulphur determination [in fuels], B., 616.

Bradley, M. J., Rosecrans, C. Z., and Corbin, R. M., theoretical and recorded pressures in oxygen bomb determinations [of calorific value], B., 316.

Bradley, W., and Rattew, W. H. J., [composition for] affixing metallic powders to articles or surfaces, (P.), B., 1018.

Bradley, William, and Robinson, R., hydrolytic fission of substituted dibenzoyl-methanes, A., 1145.

Bradley, W. M. See Foote, H. W.

Bradt, W. E., and Lyons, R. E., determination of selenium in organic compounds, A., 1266.

Bradley, F. L., and McConnell, F. J., determination of free lime in hydraulic cement, B., 980.

Brady, O. L., Cossen, A. N., and Roper, A. J., isomerism of the oximes. XXIV. 4-Methoxy-3-methyl-, 3-nitro-4-methyl-, and some α -substituted benzaldoximes, A., 69.

Brady, O. L., and Dunn, F. P., isomerism of the oximes. XXVIII. Beckmann rearrangement of N -methyl ethers of aldoximes, A., 1142.

Brady, O. L., Dunn, F. P., and Goldstein, R. F., isomerism of the oximes. XXVI. Methyl ethers of aldoximes, A., 1141.

Brady, O. L., and Elsme, G. V., 2:4-dinitrophenylhydrazine as a reagent for aldehydes and ketones, A., 394.

Brady, O. L., and Goldstein, R. F., isomerism of the oximes. XXV. Dissociation constants of some isomeric aldoximes, A., 1039.

isomerism of the oximes. XXVII. Mechanism of methylation of aldoximes, A., 1142.

Brady, O. L., and McHugh, G. P., isomerism of the oximes. XXIII. Acyl derivatives, A., 69.

Brady, O. L., and Perry, H. M., methylation of the oximes of benzil, A., 171.

Brady, O. L. See also Bishop, G.

Braunlich, H., manufacturing wood and similar materials to a preliminary treatment for the manufacture of paper board etc., (P.), B., 945.

Bragg (Sir) W. H., and Gibbs, R. E., structure of α - and β -quartz, A., 13.

Bragg, W. L., model gratings to illustrate the diffraction of X-rays by crystals, A., 12.

interatomic distances in crystals, A., 780.

Bragg, W. L., and Brown, G. B., crystalline structure of chrysoberyl, A., 227.
crystal structure of olivine, A., 995.

Bragg, W. L., Darwin, C. G., and James, R. W., intensity of reflexion of X-rays by crystals, A., 663.

Bragg, W. L., and West, J., structure of beryl, $Be_3Al_2Si_6O_{18}$, A., 889.

Braham, J. M., and Allison, F. E., fertiliser, (P.), B., 991.

Braham, J. M. See also Guernsey, E. W.

Brahdy, B. See Brehme, T.

Brahm, C., and Andersen, G., determination of the alkaloid content of lupin seeds by various methods, B., 1028.

Brahmachari, U. N., chemotherapy of antimalarial compounds in kala-azar infection. XVII. Preparation of "urea stibamine," A., 864.

Brahmachari, U. N., and Das, J., chemotherapy of antimalarial compounds in kala-azar infection. XV. Derivatives of p -aminobenzeneantimonio acid, A., 541.

Brahn, B., melanotic pigment, A., 318.

Brakefeld, J. L., and Schmidt, C. L. A., synthesis and elimination of certain components of bile in obstructive jaundice, A., 538.

Brallier, P. S., chlorination of metals, B., 820.

Braly, A., detection of tin in minerals, using the blow-pipe, A., 705.

Brame, J. S. S., determination of unsaturated hydrocarbons, B., 395, 619.

Bramhall, R. J. See Challenger, F.

Bramley, A., Zeeman effect and multiplet structure, A., 216.
dielectric constant of bromine, A., 886.

Bramley, A. See also McCurdy, W. H.

Bramley, H., striated discharge in hydrogen, A., 107.

Brammall, A., gold and silver in Dartmoor granite, A., 594.

Bramwell, B., filtering apparatus [for water], (P.), B., 726*.

Bramwell, F. H. See Synthetic Ammonia & Nitrates, Ltd.

Branchen, L. E., and Eastman Kodak Co., reducing the viscosity of nitrocellulose, (P.), B., 313, 601.

Branco, H. W. A., purification, filtration, decolorisation, and deodorisation of liquids and gases, (P.), B., 304, 776*.

Brand, E., and Sandberg, M., lability of sulphur in cystine derivatives and its possible relation on the constitution of insulin, A., 1278.

Brand, F., de-airing as corrective in drying clay ware, B., 488.

Brand, F., and Müller, K. O., and Kessler, H., diphenosuccindene series. XIII. 9-Chloro-12-alkoxy- $\Delta^{11,12}$ -diphenosuccindene, A., 1135.

Brand, K., and Sasaki, J., diphenosuccindene series. XII. Colourless and coloured isomeric hydrocarbons of the diphenosuccindene series, A., 157.

Brandenberg, W. See Hahn, G.

Brandenberger, J. E. See Lanry, M. P.

Brandes, F. W., dust-like fuel, (P.), B., 232*.

Brandsma, W. F. See Scheffer, F. E. C.

Brandt, L., determination of iron by means of titanium trichloride in the presence of copper, B., 752.

Brandt, P. See Freeman, J. R., jun.

Brandt, Philippe, rendering gelatin in textile fabrics insoluble at a moderate temperature, by means of formaldehyde in the presence of Turkey-red oil, B., 123.

Brandwood, J., liquid treatment and subsequent pressing of pulp, (P.), B., 356.

Brandwood, J., Stocker, A., and Twyver Works, Ltd., apparatus for the liquid treatment of textile materials upon rollers, (P.), B., 271*.

boxes employed in spinning artificial silk, (P.), B., 580*.

Brandwood, John, Brandwood, T., and Brandwood, Joseph, dyeing and analogous treatment of yarns in wound form, (P.), B., 189.

yarn beams on which yarns are to be wound for fluid treatment, (P.), B., 945*.

Brandwood, Joseph. See Brandwood, John.

Brandwood, T. See Brandwood, John.

Bransky, O. E. See Clair, H. F.

Braesfeld, C. J. See Smyth, H. D.

Brash, W., theory of the practice of steam deodorisation of saponifiable oils, B., 500, 923.

Brash, W. See also British Silk Research Assoc.

Brasi, E. See Scagliarini, G.

Brass, K., molecular weight of truxene and its derivatives, A., 833.

manufacture of mordant dyes of the phenanthraquinone series, (P.), B., 868.

Brass, K., and Gaylord, M., chemistry of dyeing processes [with vat dyes], B., 627.

Brass, K., and Mosl, G., union of indone and β -naphthaquinone nuclei by sulphur, A., 838.

Brassert, H. A., and Andrews, C. W., purification of [metallurgical] gases (P.), B., 18.

heating gaseous fluids, (P.), B., 729*.

Brauchli, E. See Cloetta, M.

Brauer, R., detection of resins, particularly in linseed oil varnishes, B., 595.

Brauer, R., [with Ruthsatz], typical reactions for phenols, A., 1036.

Brauer, M. See Magnus, A.

Braun, C. A., and Hay, G. S., stable aqueous [bituminous] emulsions, (P.), B., 748.

Braun, E. See Freudenberg, K.

Braun, G. See Zemplén, G.

Braun, H. J. See Akt.-Ges. für Chem. Prod. vorm. H. Scheidemann.

Braun, J. von, and Bayer, O., catalytic hydrogenations under pressure in the presence of nickel salts. IX. Anthraquinone, phenanthraquinone, and benzanthrone, A., 172.

catalytic hydrogenations under pressure in the presence of nickel salts. X. Acenaphthenequinone, A., 729.

reduction of α -methylanthraquinones by zinc dust and the non-existence of so-called anthracenyles, A., 729.

catalytic hydrogenations under pressure in the presence of nickel salts. XI. Xanthone, A., 1253.

Braun, J. von, Goll, O., and Kühn, M., relative tenacity of cyclic bases. XII. Action of organic amines on quaternary ammonium halides, A., 1259.

Braun, J. von, Goll, O., and Metz, E., pharmacological behaviour of aliphatic diamines, A., 1232.

Braun, J. von, Goll, O., and Zobel, F., relative stability of cyclic bases. X. Piperazine ring, A., 733.

Braun, J. von, and Haenel, W., odour and molecular asymmetry. III., A., 1142.

Braun, J. von, and Jostes, F., fission of imino-chlorides and -bromides, A., 825.

active methylsuccinato ester from active β -methyladipic acid, A., 938.

Braun, J. von, Kühn, M., and Siddiqui, S., unsaturated residues in chemical and pharmacological relationship. V., A., 860.

Braun, J. von, Kühn, M., and Weismantel, J., tenacity of organic residues. V. A., 1231.

Braun, J. von, and Leistner, W., dicyclic morpholines. II., A., 1253.

Braun, J. von, Leistner, W., and Münch, W., disruption of the aliphatic six-carbon chain, A., 1128.

Braun, J. von, and Münch, W., α -oxides from aldehydes and carboxylic acids. III., A., 1122.

Braun, J. von, and Murjahn, R., tenacity of organic residues. IV., A., 829.

Braun, J. von, and Reich, H., synthesis of α -homotetrahydroisoquinoline, A., 178.

Braun, J. von, and Reutter, J., benzopolymethylene compounds. XI., A., 1139.

Braun, J. von, and Teuffert, W., odour and molecular asymmetry. II., A., 65.

Braun, J. von, and Zobel, F., relative stability of cyclic bases, A., 1150.

Braun, K., determination of the clouding point of soap solutions, B., 135, 713.

Braun, L. See Kuhn, R.

Braun, M. A., volatile oil of *Myrica asplenifolia*, Endl., B., 964.

Braun, P. See Batteray, M.

Braunbek, W., lattice dynamics of melting, A., 999.

Braune, H., mobility of ions in solid cuprous and silver sulphides, A., 128.

Braune, H., and Tiedje, W., dissociation of antimony pentachloride, A., 578.

Brauner, B., new element of atomic number 61; Illinium, A., 780.

Brauner, L., geo-electrical phenomena, A., 1105.

Braunhauser, J., heterotrophic phanerogams. VI., A., 983.

Braunkohlen Produkte A.-G., production of finely divided carbon at a low temperature, (P.), B., 907.

Bravo, G. A., determination of acidity in synthetic tannins, B., 69.

Bray, T. J., steel manufacture, (P.), B., 689.

Bray, W. C., and Doss, G. J., catalytic oxidation of carbon monoxide. III. Catalytic efficiency of mixtures of dry manganese dioxide and cupric oxide, A., 917.

Bray, W. C., and Draper, H. D., capillary condensation and adsorption, A., 674.

Bray, W. C. See also Hopkins, W. M., and Livingston, R. S.

Brayton, C. A., jun., and Induction Furnace Co., building and starting electric induction furnaces, (P.), B., 985.

Brazzola, L. See Sambuc, E.

Breckenridge, G. F. See Crowell, R. L.

Breckenridge, J. E., chemistry of the fertiliser industry [In the past fifty years], B., 843*.

Bredau, R. See Sterkers, E.

Bredemeyer, H., polymorphism of iron, A., 462.

thermodynamic treatment of the occurrence of mixed crystal gaps and of compounds in solid solutions of binary systems, A., 909.

Bredig, E., Elsd, E., and Koepf, R., & Co., production of hydrocyanic acid, (P.), B., 1014*.

Bredig, M. See Kallmann, H.

Bredt, J. and Ahrens, H., Manasse's α - and β -hydroxycamphors, A., 730.

Breedis, J., and Rohm and Haas Co., fans comprising a reaction product of sulphite cellulose, (P.), B., 249.

Brégeat, J. H., recovery of volatile solvents, (P.), B., 616.

Bregmann, L. See Weissenberger, G.

Brehier, C., Brehier, G., and Jean, F. P., manufacture of soluble cocoa, (P.), B., 848.

Brehier, G. See Brehier, C.

Brehme, T., and Brähdy, B., determination of lactic acid in small amounts of blood; modification of the Clausen method, A., 1282.

Breisig, A., manufacture of a mixture of water-gas and coal-gas, (P.), B., 778.

gas generating plants, (P.), B., 778.

complete gasification of bituminous fuel, (P.), B., 908*.

Breit, G., Glaser's experiments and the orientation of molecules in a magnetic field, A., 11.

depolarising influence of alternating magnetic fields on resonance radiation, A., 224.

correspondence principle in the Compton effect, A., 551.

electromagnetic mass and momentum of a spinning electron, A., 881.

application of Pauli's method of co-ordination to atoms having four magnetic parts, A., 988.

Breit, G., and Ellett, A., depolarising influence of a rapidly changing magnetic field on the resonance radiation [of mercury], A., 1197.

Breit, O. F., and Widdington, R., passage of electrons through small apertures, A., 1189.

Breitbach, A., metallurgical furnaces, (P.), B., 132.

Brendel, G. L., oxygen-acetate method of ash determination in flour, B., 1028.

Brenk, H. See Rhenania Verein Chem. Fabriken A.-G., and Rothe, F.

Breslauer, J., and Compagnie de l'Azote et des Fertilisants S.A., preparation of a solution of cyanamide from commercial calcium cyanamide, (P.), B., 805*.

Breslauer, J., Goudet, C., and Société d'Etudes Chimique pour l'Ind., manufacture of salts of urea, (P.), B., 251*.

Bressolles, J. See Laborde, E.

Brett, G. F., photographic effect of slow electrons, A., 552.

Brewer, A. K., ionisation in reacting gases, A., 5*, 1074.

Brewer, F. M. See Sidgwick, N. V.

Breyer, F. G., Farber, C. W., and New Jersey Zinc Co., making zinc sulphide, (P.), B., 822.

Breyer, F. G., and New Jersey Zinc Co., metallurgical furnace, (P.), B., 832.

Brick, A., disinfectants, (P.), B., 998.

Bricot, P., production of ultra-violet light by impact of low-speed electrons on a metal surface, A., 218.

Bridel, M., primeverosidase and primeverase, enzymes of almond emulain, A., 43*.

specificity of enzymes, A., 756.

Bridel, M., and Béguin, C., application of rhamnodiastase to study of fresh roots of *Polygonum cuspidatum*, Sieb. and Zucc.; a new glucoside, polydatoside, A., 440, 547*.

action of almond emulain on L-arabinose in ethyl-alcoholic solution of different concentrations, A., 501.

biochemical synthesis of α -ethyl-L-arabinoside, using almond emulain, A., 501, 911*.

isolation of a new glucoside, polydatoside, hydrolyzable by rhamnodiastase, from the fresh roots of *Polygonum cuspidatum*, Sieb. and Zucc., A., 761.

composition of *Salix triandra*, L.; rutoside, asparagine, and a new glucoside, salidroside, A., 983, 1133*.

isolation from the flowers of *Ulex europeus*, L., of a new glucoside hydrolyzed by rhamnodiastase, A., 1183.

Bridel, M., and Charaux, C., enzyme extracted from seeds of *Rhamnus*, rhamnodiastase, A., 201, 434*.

glucosides in plants hydrolysed by rhamnodiastase, A., 201, 440*.

Brigdon, P. W., alkali metals under high pressure [effect on the melting constants, electrical resistance, and volume], A., 232, 665*.

universal constant of thermionic emission, A., 449.

effect of tension on the transverse and longitudinal resistance of metals, A., 565.

Brieger, C. See Bachmann, W.

Briers, F., Chapman, D. L., and Walters, E., influence of intensity of illumination on the velocity of photochemical changes; determination of the mean life of a hypothetical catalyst, A., 484.

Briquetaud, and Carpenter, G., determination of the electrical conductivity of biological fluids, A., 762.

Briggs, A. J. See Syracuse Pulverizer Corporation.

Briggs, A. P., metabolic aspects of calcium therapy, A., 971.

Briggs, A. P. See also Bishop, G. H., and Weber, C. J.

Briggs, G. E., kinetics of enzyme action, A., 201.

relation of trypsin and pepsin to their substrates, A., 866.

Briggs, G. H., photographic method of determining mobility of recoil atoms, A., 332.

Briggs, J. F. See British Celanese, Ltd.

Briggs, R. M. See Dundon, M. L.

Briggs, S. H. C., isomeric chlororuthenates, A., 920.

Werner's co-ordination theory and the electrical structure of the atom; relationship between valency and co-ordination, A., 1194.

Bright, T. B., microscopical examination of damaged cotton hairs by the Congo-red test and the swelling test of Fleming and Thayesen, B., 870.

Brigl, P., and Held, R., proteins. III. Constitution of proteins, A., 630.

Brigl, P., and Kepler, H., carbohydrates. IV. Synthesis of α -glucosides, A., 941.

Brikethar-G.m.b.H., binding material [for briquettes], (P.), B., 182.

Brill, R., silk fibroin, A., 312.

Brillouin, L., forces due to radiation, A., 107.
the new atomic mechanics, A., 773.

Brinkley, F. G. See Dickinson, T.

Briner, E., Agathon, O., and Ferrero, A., additive compounds between phenols and ammonia, I., A., 1241.

Briner, E., Biedermann, H., and Rothen, A., compression and decomposition of nitric oxide, A., 16, 343*.

Briner, E., Boner, J., and Rothen, A., formation of nitric oxide at high temperatures, A., 910.

Briner, E., Meiner, C., and Rothen, A., thermal decomposition of nitrous oxide, A., 685.
thermal decomposition of nitrous and nitric oxides, A., 921.

Bring, J. See Kasenay, P.

Bringhenti, P., concentrating solutions, even those liable to incrust and corrosive, (P.), B., 776.
apparatus for recovering heat from coke, slags, ashes, and other solid substances, (P.), B., 908*.

Brinkman, R. See Buytendijk, F. J. J.

Brinkworth, J. H., ratios of specific heats of nitrogen at atmospheric pressure and between 10° and —183°, A., 668.

Brinley, F. G., insecticidal value of certain war chemicals as tested on the tent caterpillar, B., 926.

Brioux, C., identification of dried apple marc in foods, B., 510.

Brioux, C., and Pien, J., comparative fertilising activities of different forms of nitrogen in new urea fertilisers derived from cyanamide, B., 260.

Briscoe, H. B. See Mathers, F. C.

Briscoe, H. V. A., and Robinson, P. L., constancy of atomic weights, A., 331.
volatility and dissociation of borax, A., 1007.

Briscoe, H. V. A., Robinson, P. L., and Stephenson, G. E., density of boric oxide glass and the suspected variation in the atomic weight of boron, A., 219.
density of boric oxide from a fractional crystallisation of boric acid, A., 569.

Briscoe, H. V. A. See also Cleminson, J., Jolly, V. G., Robinson, P. L., and Sayce, L. A.

British Alizarine Co., Ltd., Anderson, J., and Dawson, W. H., manufacture of benzanthrone derivatives, (P.), B., 658.

British Alizarine Co., Ltd., and Barnard, C. M., dyeing of cellulose ester artificial silks, (P.), B., 628.
preparing dyestuffs, (P.), B., 974.

British Alizarine Co., Ltd. See also Barnard, C. M.

British Aluminium Co., Ltd., Gwyer, A. G. C., and Phillips, H. W. L., [aluminium-copper] alloys, (P.), B., 132.

British Aluminium Co., Ltd. See also Gwyer, A. G. C.

British Alkali Co., Ltd. See Hewitt, H.

British Cast Iron Research Association. See Fletcher, J. E.

British Celanese, Ltd., Briggs, J. F., Kidd, J. T., and Palmer, C. W., treatment of threads, fabrics, or other materials composed of or containing artificial filaments, (P.), B., 1008.

British Celanese, Ltd., and Ellis, G. H., dyeing, printing, or stencilling cellulose acetate, (P.), B., 87, 124, 741.
dyeing or coloration of cellulose acetate, (P.), B., 914.

British Celanese, Ltd., Ellis, G. H., and Goldthorpe, W. O., dyeing, printing, or stencilling acetyl cellulose, (P.), B., 50.

British Celanese, Ltd., Ellis, G. H., and Greenhalgh, E., printing or stencilling of products of acetyl cellulose [cellulose acetate], (P.), B., 124.

British Celanese, Ltd., Palmer, C. W., and Fulton, S. M., [re-lustrelling] treatment of threads, fabrics, or other materials containing [cellulose acetate] artificial filaments, (P.), B., 976.

British Celanese, Ltd., Ryley, C. F., and Awocko, G. A., preparations for textile [sizing], (P.), B., 189.

British Celanese, Ltd., Woodman, T. C., and Dickie, W. A., fabrics or materials and their manufacture, (P.), B., 532.

British Cotton and Wool Dyers' Association. See Caldwell, P.

British Cyanides Co., Ltd., and Rossiter, E. C., artificial resins, (P.), B., 451.
manufacture of articles from synthetic resins, (P.), B., 988.

British Cyanides Co., Ltd., Rossiter, E. C., and Davis, W. C., treatment [with synthetic resins] of cotton, silk, or artificial silk or goods made therefrom, (P.), B., 977.

British Dyestuffs Corporation, Ltd., Baddiley, J., Hill, J., and Riley, A., manufacture of azo-colouring matters dyeing wool fast to milling, (P.), B., 85.

British Dyestuffs Corporation, Ltd., Baddiley, J., and Shepherdson, A., manufacture [purification] of reddish-yellow vat dyestuffs [flavanthrone], (P.), B., 473.

British Dyestuffs Corporation, Ltd., Baddiley, J., Shepherdson, A., Swann, H., Hill, J., and Lawrie, L. G., dyeing acetyl cellulose [cellulose acetate] or fabrics containing it and new products [dispersing agents] for use therein, (P.), B., 317.

British Dyestuffs Corporation, Ltd., Bunbury, H. M., and Robinson, R., preparation of aminodianthrimides, (P.), B., 398.
mono-oxamic acids of diaminoanthraquinones, (P.), B., 528.

British Dyestuffs Corporation, Ltd., Cronshaw, C. J. T., and Naunton, W. J. S., manufacture of new accelerators and of intermediate compounds for use in vulcanisation of rubber, (P.), B., 138.

manufacture of xanthates, (P.), B., 665.

vulcanisation of rubber, (P.), B., 682.

manufacture of diarylguanidines, (P.), B., 769.

British Dyestuffs Corporation, Ltd., and Hodgson, H. H., manufacture of chloro- and chloronitro-derivatives of m-hydroxybenzaldehyde, (P.), B., 973.

British Dyestuffs Corporation, Ltd., Horsfall, R. S., Lawrie, L. G., Henderson, J. A. R., and Hill, J., dyeing [cellulose] acetate silk, (P.), B., 976.

British Dyestuffs Corporation, Ltd., Perkin, W. H., jun., and Bunbury, H. M., manufacture of intermediates [monoacylated diamines of the anthraquinone series], (P.), B., 817.

British Dyestuffs Corporation, Ltd., Perkin, W. H., jun., and Burger, A. W., manufacture of acritine derivatives [bactericides], (P.), B., 420.

British Dyestuffs Corporation, Ltd., Perkin, W. H., jun., Fyfe, A. W., and Mendoza, M., manufacture of anthraquinone derivatives, (P.), B., 658.

British Dyestuffs Corporation, Ltd., Perkin, W. H., jun., and Hollins, C., dyeing cellulose acetate, (P.), B., 124.
manufacture of anthraquinone dyestuffs possessing affinity for acetyl [cellulose acetate] silk, (P.), B., 398, 910.

British Dyestuffs Corporation, Ltd., Renshaw, A., and Fairbrother, T. H., protection of cotton and other textile materials from mildew, (P.), B., 1009.

British Dyestuffs Corporation, Ltd., and Saunders, K. H., manufacture of intermediate compounds and of azo-dyestuffs, (P.), B., 233.

British Dyestuffs Corporation, Ltd., and Saunders, K. H., manufacture of new aminotriarylmethanes and of azo-dyestuffs derived from them, (P.), 866.

British Dyestuffs Corporation, Ltd., Saunders, K. H., and Goodwin, H., manufacture of azo-dyes, (P.), B., 7.

British Dyestuffs Corporation, Ltd. See also Baddiley, J., and Lefebure, V.

British Enka Artificial Silk Co., Ltd., and Naamloze Venootschap Nederlandsche Kunststijdefabriek, manufacture of artificial products from viscose, (P.), B., 871.

British Launderers' Research Association, and Parker, R. G., tintometer, (P.), B., 968.

British Launderers' Research Association, Parker, R. G., Jackman, D. N., and Fowler, J. N., determining the volume and weight of the solid or liquid contents of receptacles, (P.), B., 1000*.

British Leather Manufacturers' Research Association. See Lloyd, D. J.

British Oxygen Co., Ltd., and Houseman, C. R., apparatus for obtaining intimate contact between gases and liquids, (P.), B., 616.

British Perlit Iron Co., Ltd., [casting] of cast iron articles, parts of which have very different thicknesses, (P.), B., 756*.

British Silk Research Association, Denham, W. S., and Brash, W., treatment of silk, (P.), B., 627.

British Thomson-Houston Co., Ltd., and Adams, L. V., resinous compositions, (P.), B., 638.

British Thomson-Houston Co., Ltd., and Adams, N. H., metal compositions, (P.), B., 710.

British Thomson-Houston Co., Ltd., and Charlton, E. E., gaseous electric conduction devices, (P.), B., 834.

British Thomson-Houston Co., Ltd., and Compagnie Française pour l'Exploit des Proc. Thomson-Houston, protecting electric transformer oils against oxidation, (P.), B., 650.

British Thomson-Houston Co., Ltd., and Devers, P. K., making vitreous silica, (P.), B., 667*.

British Thomson-Houston Co., Ltd., Dushman, S., and Kober, P. A., making sag-resisting bodies [filaments] of tungsten, (P.), B., 676.

British Thomson-Houston Co., Ltd., and Fonda, G. R., electric incandescence lamps, (P.), B., 413.

British Thomson-Houston Co., Ltd., Found, C. G., and Langmuir, I., electric discharge devices and means for operating them, (P.), B., 66*.

British Thomson-Houston Co., Ltd., and Gillette, R. T., welding electrodes, (P.), B., 412*.

British Thomson-Houston Co., Ltd., and Hollnagel, H. P., removing coatings from conductors, (P.), B., 134.

British Thomson-Houston Co., Ltd., and Howe, G. H., protecting metallic articles against oxidation, (P.), B., 496*.

British Thomson-Houston Co., Ltd., and Ipsen, C. L., electric furnaces, (P.), B., 676.

British Thomson-Houston Co., Ltd., and Keenan, W., heating coils for electric furnaces, (P.), B., 793.

British Thomson-Houston Co., Ltd., and Langmuir, I., heating processes and apparatus [utilising atomic hydrogen], (P.), B., 198.

British Thomson-Houston Co., Ltd., and Massoy, W. F., [means for sealing evacuated] furnaces, (P.), B., 314*.

British Thomson-Houston Co., Ltd., and Mullaney, D. A., electric discharge devices, (P.), B., 831.

British Thomson-Houston Co., Ltd., and Niedergesass, B. F., making elongated articles of vitreous silica, (P.), B., 489.

British Thomson-Houston Co., Ltd., and Orr, C., refrigerating machine, (P.), B., 76*.

British Thomson-Houston Co., Ltd., and Palmer, R., welding processes [using atomic hydrogen] and apparatus therefor, (P.), B., 363.

British Thomson-Houston Co., Ltd., and Payman, S., temperature-controlling devices for electric furnaces, (P.), B., 794*.

British Thomson-Houston Co., Ltd., and Peterson, C. F., resinous compositions, (P.), B., 988.

British Thomson-Houston Co., Ltd., and Van Brunt, C. G., purifying [used lubricating] oil, (P.), B., 184, 814.

British Thomson-Houston Co., Ltd., Warren, H. W. H., Newbound, R., and Bell, L. M. T., [control of stirrer in] apparatus employed in synthetic resin condensation processes, (P.), B., 681*.
[temperature-sensitive devices for] controlling chemical reactions, (P.), B., 650*.

British Thomson-Houston Co., Ltd., and Weed, J. M., arc-welding electrodes, (P.), B., 498.

British Thomson-Houston Co., Ltd., and Whitney, W. R., production of a matte surface on articles comprising a binder consisting of a heavy hydrocarbon compound, (P.), B., 748.

British Thomson-Houston Co., Ltd., Wright, J. G. E., and Bartlett, W. J., resinous condensation products, (P.), B., 414.

British Thomson-Houston Co., Ltd. See also Miller, L. B.

Britton, E. C. See Harlow, I. F.

Britton, G. T., and McBain, J. W., amalgams of gold and mercury, A., 474.

Britton, H. T. S., electrometric study of the separation of silver iodide, bromide, and chloride, A., 39.
electrometric study of the reactions between alkalis and silver nitrate solutions, A., 135.

electrometric and phase-rule study of basic salts of copper, A., 246.

hydrogen electrode studies of the precipitation of basic chromates, borates, and carbonates, A., 247.

hydrogen electrode studies of the reactions between solutions of salts of weak metallic bases and sodium acetate, oxalate, and tartrate; effect of dextrose on zirconium chloride solution, A., 586.

Brizeke, E. See Kyber, W.

Briusova, L. J. See Namestkin, S. S.

Briual, A. A., modification of Jellinek's method for determining sulphate, A., 1221.

Broadbent, H. See Broadbent, T., & Sons, Ltd.

Broadbent, T., & Sons, Ltd., and Broadbent, H., safety devices for centrifugal machines, (P.), B., 937*.

Broadbridge, W., Sellers, W. G., and Minerals Separation North American Corporation, purification or extraction of soluble substances [sodium nitrate from caliche], (P.), B., 488*.

Broadhead, R. W. See Barnes, A.

Broadway Trust Co., Ltd., Burney, C. D., and Temple, J. E., manufacture of light forms of concrete or artificial wood composed of loose or fibrous organic materials and cement, concrete, etc., (P.), B., 669.

Broche, H., normal composition of the light oil from the low-temperature tar from bituminous coals, B., 232.

Broche, H., and Bahr, T., oily bitumen and solid bitumen of bituminous coal, A., 3.

Brockbank, C. J., and Abrasive Co., manufacturing artificial abrasives, (P.), B., 241.

Brockway, G. G., drying furnaces, (P.), B., 425.

Brode, J. See Badische Anilin- & Soda-Fabrik.

Brode, R. B., absorption coefficient for slow electrons in mercury vapour, A., 4*.

Brode, W. R., effect of solvents on the absorption spectrum of a simple azo-dye [benzenecarbazole], A., 223.

disassociation of potassium iodide and the absorption spectra of iodine and potassium iodide, A., 882.

absorption spectra of benzeneazobenzene, A., 884.

subsidiary dyes in commercial Agalma Black 10B, B., 702.

Brode, W. R., and Adams, Z., optically active dyes. III. Physical properties, dyeing reactions, and mechanism of dyeing. IV. Asymmetric dyes from *m*-aminonandelic acid, A., 1031.

Brode, W. R. See also Appel, W. D., and Phipps, T. E.

Broderick, A. E. See Marvel, C. S.

Brodersen, K. See Alt.-Ges. für Anilin-Fabrik., and L. G. Farbenind. A.-G.

Brodum, E., and Hoffmann, F., total brightness of the black body at the *m* p. of palladium and platinum and its applicability as a unit of light, A., 784.

Brodkorb, F. See Hüttig, G. F.

Brodmann, L. See Weigert, F.

Brodski, D. A. See Rakuzin, M. A.

Brodsky, A. E., application of the osmotic theory of Nernst to non-aqueous solutions, A., 347.

[solubility of potassium halides in alcohol-water mixtures], A., 672.

electromotive force and the solvent, A., 688.

electrode potentials and the solvent, A., 688.

Brodsky, A. E., and Scherschewer, J. M., solubility product of mercury halides in water, A., 247.

Brotton, E. R., fluid [methylene chloride] for industrial purposes [fire-extinguishing etc.], (P.), B., 472.

Bronsted, J. N., acid-basic function of molecules and its dependence on the electric charge type, A., 797.

Bronsted, J. N. [with Delbano, A., and Volquartz, K.], kinetics of aquotisation, A., 1107.

Bronsted, J. N., and Brumbaugh, N. J., activity coefficients of tervalent ions in very dilute solutions, A., 907.

Brokamp, P. B. See Taylor, H. P.

Bromley, H. A., and De Waele, A., electrometric determination of the acidity of writing inks, B., 1020.

Bronfenbrenner, J. J., electro-ultrafilter, A., 1118.

Brown, J., articles of fused magnesite [magnesia], B., 127.

diminution and behaviour of the sulphur contained in producer-gas in the Siemens-Martin furnace, B., 410.

Brown, J. J. See Rombacher Hüttenwerke.

Bronstein, J. B., and Trojan Powder Co., drying finely-divided materials [nitro-starch], (P.), B., 341.

Bronstein, M., motion of an electron in the field of a solid centre with regard to change of mass by radiation, A., 331.

fine structure of spectral lines, A., 765.

Brooke, W. L., deodorisation of coconut oil, B., 836.

Brooker, L. G. S., and Smiles, S., method of inserting the thioaryl group, A., 947.

Brookes, C. J., solubility of silica and other rock-forming substances during cyanidation, B., 882.

Brooks, B. T., manufacture of alcohols from hydrocarbons with particular reference to petroleum as a raw material, B., 298*.

distillation of lubricating oils under high vacuum, B., 811.

chemistry of gasolines, particularly with respect to gum formation and discolouration, B., 1003.

Brooks, B. T., and Carbide and Carbon Chemicals Corporation, process of making motor spirits and refining petroleum products, (P.), B., 120.

Brooks, M. M., permeability of living cells. VI. Penetration of certain oxidation-reduction indicators as influenced by p_a ; determination of the r_u of *Valonia*, A., 639.

permeability of protoplasm to ions, A., 645.

effect of p_a , light, and other factors on the penetration of 2:6-dibromo-phenol-indophenol and other dyes into a living cell, A., 647.

Brooks, O. M. See Sims, J. M.

Broomé, B., Laus photographs of crystalline benzene, A., 665.

Broomé, E. L., and Gen. Reduction Gas & By-Products Co., gas-producing apparatus, (P.), B., 813.

Brossa, G. A., colloidal properties of sericin, A., 22.

Broude, L., substances extracted from muscle. XXVI. Properties of carnosine and its compounds, A., 1265.

Brouwer, E., distinction between buttermilk and soured, separated [centrifuged] milk, B., 212.

vitamin-C in grass, B., 213.

nature of the agglutination of fat globules. IV. Relation of serum globulins to the "creaming" of milk, B., 337.

Brouwer, G., anaemia, urobilinuria, and intestinal haemorrhage in rabbits in consequence of exclusive nutrition with cow's and goat's milk, A., 425.

Brown, A. See Tisdall, F. F.

Brown, A. E., drying of clay products and other goods, (P.), B., 362.

Brown, A. E. See also Universal Rubber Paviors (Manchester, 1923), Ltd.

Brown, A. H., and Siluminite Insulator Co., Ltd., condensation products of phenol and the like, (P.), B., 838.

manufacture of electrical insulators and other moulded articles, (P.), B., 986.

Brown, B. K., Bogin, C., and Commercial Solvents Corporation, cellulose acetate composition, (P.), B., 783.

Brown, C. R. B., bacterial filters for purification of sewage and other liquids, (P.), B., 302*.

Brown, D. See Piper, S. H.

Brown, D. G., and Cumming, W. M., action of chlorine on aniline; formation of induline dyestuffs. I., B., 909.

Brown, D. J., electrolytic separation of metals, A., 483.

Brown, D. J., and Teft, R. F., manganese dioxide-permanganate electrode, A., 687.

Brown, D. J. See also Arenson, S. B.

Brown, F. E., and Snyder, J. E., vanadium oxytrichloride as a solvent, A., 18.

formation of ethyl mercaptan from ethyl iodide in aqueous hydrogen sulphide solutions and its bearing on the mechanism of the precipitation of metals by hydrogen sulphide, A., 936.

Brown, F. E., and White, W. C. O., decomposition of potassium chlorate in the presence of iron oxide, A., 1011.

Brown, F. E. See also Burrows, J. A.

Brown, F. L., comparison of the red cadmium line in the vacuum arc and in the discharge tube, A., 986.

Brown, F. S., and Bury, C. R., cryoscopic measurements with nitrobenzene. IV. Association in nitrobenzene solution, A., 675.

Brown, G. B. See Bragg, W. L.

Brown, H., determination of uric acid in blood, A., 763.

mineral content of skin, A., 969.

Brown, J. R., Mullinix, J. C., and Reliance Gauge Column Co., electroplating [a non-metallic] article, (P.), B., 1019.

Brown, J. R. See also Clarke, S. W.

Brown, J. S., influence of time factor on tensile tests at high temperatures, B., 328*.

Brown, J. W., physiology of apples. V. Methods of ash analysis, and effect of environment on the mineral constitution of the apple, B., 605.

Brown, M. J., and Pacific R. and H. Chemical Corporation, apparatus for producing and recovering reaction gases [hydrogen cyanide], (P.), B., 405.

Brown, M. J., and Roessler and Hasslacher Chemical Co., synthesising gases in electric furnaces, (P.), B., 98.

Brown, O. W., Henke, C. O., and Newport Co., reduction of azo-compounds to hydrazo-compounds, (P.), B., 816.

Brown, P. A. See Winzer, C. B.

Brown, R. J. See Shafer, R. W.

Brown, R. P., and Brown Instrument Co., [alloy for] thermocouple casing, (P.), B., 635.

Brown, R. S. See Klein, C. A.

Brown, S., and Halowax Corporation, [naphthalene] chlorination apparatus, (P.), B., 149.

Brown, S. See also Griscom Russell Co.

Brown, S. M. See Kelley, W. P.

Brown, W. E., and Henderson, V. E., anaesthetic gases, B., 645.

Brown, W. J., and Metropolitan-Vickers Electrical Co., Ltd., heat treatment [surface hardening] of material by electricity, (P.), B., 953.

Brown, W. R. See Newton, R.

Brown Co. See Moore, H. K., and Richter, G. A.

Brown Instrument Co. See Brown, R. P.

Browne, A. W., and Hazmburg, R. S. von, lecture experiments with the new halogenoid, azidocarbondisulphide, A., 1130.

Browne, A. W., and Smith, G. B. L., azido-dithiocarbonic acid. II. Determination of the azido-dithiocarbonate radical, A., 39.

Browne, A. W., and Wilcoxon, F., hydronitric acid [azoinimide] as desolvation product of "ammononitric," "hydronitrous" and "ammonohydrazonitrous" acids; experimental formation of sodium azide by ammonolysis of sodium nitrite with sodamide, A., 487.

Browne, R. J., [ultrafiltration of vegetable tanning solutions], B., 926.

Browne, V. B., magnetic [iron-silicon] alloys, (P.), B., 282.

Browning, B. L. See Schrenk, W. T.

Browning, C. H., Cohen, J. B., Ellingworth, S., and Gnilbransen, R., antiseptic properties of amino-derivatives of styryl- and anil-quinoline, A., 1153.

Brownlie, D., coal blending, B., 650, 860*.

low-temperature carbonisation, B., 651.

Brownson, H. W., and Nobel's Explosives Co., manufacture of detonators and cartridges, (P.), B., 142.

Brownson, T. K., and Cray, F. M., electrical conductivities of hydrogen chloride and potassium chloride in water and acetone-water mixtures, A., 246.

Brownstead, J. P., use of sodium aluminate as a coagulant, B., 342.

Broxon, J. W., natural ionisation in gases, A., 656.

Brubaker, H. W., Van Barcom, H. S., and Walker, N. H., determination of iodine in natural waters, B., 630.

Bruce, H. D., photometric method for measuring the hiding power of [light-coloured] paints, B., 500.

Bruce, J. R., respiratory exchange of the mussel (*Mytilus edulis*, L.), A., 968.

Bruchhausen, F. von, constitutions of corycavidiine and corycaramine, A., 184.

determination of carbon dioxide in carbonates and the evaluation of Ferrum carb. sacchar., A., 591.

Bruchhausen, F. von, and Hanzlik, E., determination of mercuric chloride, A., 592.

Bruchhausen, F. von, and Saway, K., alkaloids of *Corydalis cava*: corybulbine and isocorybulbine; [synthesis of the methyl ethyl ether of nor-*m*-hemipinic acid], A., 185.

Bruchhausen, W. von. See Gadamer, J.

Brucke, K., sugar and calcium in cerebrospinal fluid, A., 858.

Bruckhaus, H. W., weighting and decreasing the lustre of artificial silk, B., 530.

increasing the wet strength of [cellulose] artificial silks, B., 689.

Bruchhoff, A. M., degreasing raw wool, (P.), B., 9.

Brückmayr, G. See Aurig, M.

Brück, Kretsch & Co., and Klippe, O., agglomeration of fine ores, roasted pyrites, coke smalls, and other pulverulent materials for smelting, (P.), B., 754.

Brüda, B. See Friedrich, A.

Brügel, S. See Lasch, F.

Brügmann, C., extraction apparatus, A., 593.

Brüle, M., Garban, H., and Amer, A., source of errors in the determination of glycuronic acid in urine, A., 317.

Brüninghaus, A., production of steel, (P.), B., 370*.

Brüere, F., reaction of paraaldehyde applicable to carbohydrates, A., 1026.

Brüssoff. See Brussova.

Brügge, G. L., preparation for finishing natural or artificial fabrics, (P.), B., 154.

Brugger, W. See Ruzicka, L.

Brugmann, E. W. See Clark, G. L.

Brugsch, T., Cahen, M., and Horsters, H., intermediate carbohydrate metabolism. XI. The hexosediphosphatase of muscle and liver and the product of fission, hexosemonophosphoric acid, A., 197.

Brugsch, T., and Horsters, H., intermediate carbohydrate metabolism. X. Glycolysis, A., 197.
 intermediate carbohydrate metabolism. XVI. Glycolysis and glycometabolism with special reference to insulin. XVII. Myophosphate. XVIII. Hydrolysis of zymohexosediphosphoric acid by muscle and its product of fission, monohexophosphoric acid. XIX. Mechanism of insulin action. XX. μ of whole blood after injection of insulin into rabbits, A., 1055.
 co-enzymatic nature of insulin, A., 1179.

Brugsch, T., Horsters, H., and Harada, Y., intermediate carbohydrate metabolism. XV. Muscle dehydrogenases, A., 198.
 Brugsch, T., Horsters, H., and Narita, S., intermediate carbohydrate metabolism. XIII. Formation of lactic acid in the liver from acetic, tartaric, malonic, and succinic acids, A., 198.
 intermediate carbohydrate metabolism. XIV. Action of insulin on muscle dehydrogenases, A., 198.

Bruhat, G., and Pauthenier, M., dispersion of carbon disulphide in the ultraviolet, A., 11*.
 rotatory power of tartaric acid in dilute solution using ultra-violet light, A., 601.
 dispersion of carbon disulphide and the Ketteler-Helmholtz formula, A., 886.

Bruhat, G., and Thomas, V., dimagnesium derivatives of benzene compounds, A., 1028.

Bruhat, J., resinous condensation products from phenols and formaldehyde, B., 955.

Brulé, A., and Maxymowicz, W., precipitation of tellurium from alkali sulphide solutions and its separation from heavy metals and from selenium, A., 490.

Brunkner, B., and Uhlenbrück, P., ultrafiltration of serum, A., 191.

Brull, L., and Elchholz, F., effects of calcium and potassium ions on urine secretion, as studied in the whole animal, A., 88.
 secretion of inorganic phosphate by the kidney. II. Influence of the pituitary gland and of the wall of the third ventricle, A., 88.

Brull, L. See also Elchholz, F.

Brumbaugh, N. J. See Brönsted, J. N.

Brummer, E., regularity in the action of electromagnetic waves; disruptive action on [atomic] nuclei, A., 221.

Brun, P., properties of ternary liquid mixtures, A., 683.
 miscibility of quaternary mixtures of water and alcohols, A., 895.

Brunetti, R., effects of chemical combination on the energy of the intra-atomic levels, A., 11.
 relative sizes of atoms and ions, A., 107.
 continuous absorption along an optical series and structure of high-frequency absorption bands, A., 215.

Bruni, G., sulphur chloride and sulphur, A., 256.

Bruni, G., and Ferrari, A., solid solutions between compounds of elements of different valency; lithium chloride and anhydrous magnesium chloride, A., 236.
 crystal structure of bivalent chlorides, A., 995.

Brunius, E. See Euler, H. von.

Brunn, G., preparation of condensation products from phenols and their substitution products, (P.), B., 890.

Brunner, F. See Kehrmann, F.

Brunner, J., and Hammerschmid, H., morphology of graphite, A., 996.

Brunner, J. See also Sirius Werke A.-G.

Brunner, W. See Herz, R.

Brunngässer, K. See Hahn, F. L.

Brunn, B. P., conductivity and electrolysis of iodine trichloride in acetic acid, A., 30.

Brunn, H., influence of iodine on the conductivity of aqueous solutions of cadmium iodide and potassium iodide, A., 128.

Brunswig, H., molecular dimensions of cellulose, A., 1026.

Brunt, van. See Van Brunt.

Brus, G. See Dupont, G. H.

Bruson, H. A., and Ständer, H., "cyclopentadiene rubber"; a new cyclic synthetic polymerisation product, B., 451.

Bruson, H. A. See also Ständer, H.

Brutzkus, M., water-gas from liquid hydrocarbons, (P.), B., 521.
 apparatus for chemical production and research, (P.), B., 616*.
 production of light oils suitable for use as fuel for internal combustion engines from [A] water-gas or similar gases, [B] liquid and solid organic bodies, (P.), B., 654.

Bryaullants, P., action of organo-magnesium compounds on nitriles, A., 826.

Bryaullants, P., and Castille, A., ultra-violet absorption spectra of butenonitriles and butenoic acids, A., 8.

Bryaullants, P., and Mathus, L., trimeric crotononitrile, A., 1027.

Bruzac, A. See Constant, G.

Bruzac, B., thermal decomposition of carbonates, A., 692.

Bruž, B. See also Centherszwey, M.

Bryan, A. W., clinical and experimental studies on sodium benzoate, A., 426.

Bryant, F. L., granulating mill, (P.), B., 650.

Bryce, J., [alloy for] glass-melting container, (P.), B., 824.

Bryllinskii, A., rendering gelatin in textile fabrics insoluble at a moderate temperature by means of formaldehyde in the presence of Turkey-red oil, B., 123.

Brysilka, Ltd., and Schubert, F. W., collapsible reels for winding filaments, yarns, threads, silks, etc., (P.), B., 945*.
 manufacture of artificial silk [cuprammonium cellulose], (P.), B., 1009.

Budazde, S. See Abderhalde, E.

Bub, L. See Badische Anilin- & Soda-Fabrik.

Buba, H. H., [roasting] furnace, (P.), B., 424.

Bube, K., continuous carbonisation and cracking of bituminous materials under pressure, (P.), B., 907.
 decreosetting tar and tar products, (P.), B., 909.
 desulphurising naphthalene or paraffin, (P.), B., 1007.

Bubeck, H., determination of α -cellulose, B., 579.

Bubla, K., process of impregnating wood, (P.), B., 918.

Bucarius, W. See Hantzsch, A.

Buchan, N., obtaining pure gum [resin] from some crude gum materials, (P.), B., 761*.

Buchanan, G. H., fumigant, (P.), B., 998.

Buchanan, G. H., and American Cyanamid Co., stabilising liquid hydrocyanic acid, (P.), B., 488.

Buchanan, G. H., and Carbide and Carbon Chemicals Corporation, process of making olefin oxides; process of making propylene oxides, (P.), B., 692*.

Burdick, J. L., effect of air in the Jones reducer, A., 706.

Burdon, R. S., spreading of one liquid on the surface of another, A., 348.

Buchanan, G. H. See also Landis, W. S.

Buchanan, R. See Wherry, E. T.

Bucher, A. See Staudinger, H.

Bucherer, A. H., fine structure of hydrogen lines, A., 765.

Bucherer, H., reduction of organic compounds with hydrosulphites, (P.), B., 528.

Bucherer, H. T., and Barsch, H., action of sulphites on aromatic amino- and hydroxy-compounds, X. I. Products of the action of sulphites on 1:8-dinitronaphthalene, A., 162.

Buchheim, R. See König, W.

Buchholz, M., preventing the formation of explosive gas mixtures or similar dangerous mixture in electrical apparatus immersed in oil, (P.), B., 922.

Bucher, C. A. See Evans, W. L.

Bucher, J., manufacture of hydrofluoric acid, (P.), B., 915.
 process of producing hydroxides and carbonates, (P.), B., 1013.

Bucher, M., and Bachmann, W., preparation of a product for spraying plants, (P.), B., 71.

Buck, E. C., vitreous composition [resistant glass], (P.), B., 362.

Buckenauer, H., nitrogen and fat deposition in growing pigs fed on a diet containing glycine and ammonium acetate as a substitute for protein, A., 972.

Buckley, H. E., anomalous optical properties of some new series of isomorphous double tartrates, A., 1085.

Buckman, T. E., Adams, F. D., Smith, M., and Edwards, H. T., blood in pneumonia. I. Method of constructing an alignment diagram to represent changes in gaseous composition of blood and in electrolyte concentration of plasma, A., 1084.

Buckner, G. D., phenolphthalein: preparation, and reaction towards oxydases and peroxidas, A., 733.

Buckner, G. D., Martin, J. H., and Peter, A. M., comparative analyses of faeces of laying hens, with and without a calcium carbonate supplement in the diet, A., 1169.

Budat, A. See Jellinek, K.

Budd Manufacturing Co., E. G., heat treatment of steels and other metals, (P.), B., 411.

Budd Manufacturing Co., E. G. See also Kelley, G. L.

Budde, C. C. L. G. See Boorne, W. H.

Budnikov, P. P., microchemical examination of gypsum, A., 923.
 activation of the inert varieties of calcium sulphate, A., 1012.
 comparison of methods for the determination of sodium sulphide, B., 154, 664.
 production from raw clay of material stable towards water, B., 625.
 manufacture of cementitious substances, (P.), B., 981.

Budnikov, P. P., and Lewin, M. E., manufacturing cements [plaster] from overburnt gypsum, overburnt gypsum waste, or natural anhydrite, (P.), B., 543.

Budnikov, P. P., and Schilov, E., action of sulphur monochloride on silica, A., 256.
 preparation of silicon tetrachloride [from silica], A., 813.

Bücking, C., manufacturing paper, (P.), B., 123*.

Bühl, A., electrical double layer at the surface of mercury, A., 770.

Buehrer, T. F., and Schupp, O. E., jun., successive potentiometric titration of copper and iron in metallurgical products, B., 282.

Buel, H., Bulgarian milk, (P.), B., 848.

Billow, W. See Meyer, K. H.

Bürstebinder, K., determination of total alkalinity in presence of alkaline earths, B., 742.

Büschling, W., concentrating nitric acid in a column, (P.), B., 666*.

Büttner, H. E., determination of free acid in gastric juice, A., 212.

Bufano, M., combined sugar in blood, A., 315.

Buffalo Foundry and Machine Co. See Miles, H. D.

Buffam, (Mfis) M. C. W., and Ireton, H. J. C., under-water spark spectrum of a number of elements, A., 1.

Buffington, R. M., and Latimer, W. M., measurement of coefficients of expansion at low temperatures; some thermodynamic applications of expansion data, A., 1088.

Buffington, R. M. See also Latimer, W. M.

Bugge, G., nomenclature of wood distillation products, B., 809.

Buhler, A., Buhler, O., and Buhler, W., (Buhler Bros.), roll or cylinder mills for grinding paint and other substances, (P.), B., 937.

Buhler, O. See Buhler, A.

Buhler, W. See Buhler, A.

Buhtz, E., carrying out chemical reactions, (P.), B., 520.

Bule, T. S. See Skinner, J. J.

Buissou, H., and Jausseran, C., variation of ozone in the atmosphere, A., 267.

Bulger, H. A. See Peters, J. P.

Bulir, J., tests for rancidity in fats, B., 66.

Bulley, R. See Herschel, W. H.

Bullard, R. H. See Kraus, C. A.

Bullen, S. C., doll-head bearings for drying cylinders, (P.), B., 145*.

Bullock, K., chemical constituents of the oleo-resin and fatty matter of Indian valerian root, B., 802.

Bunbury, H. M. See British Dyestuffs Corporation, Ltd.

Bundesmann, H. See Auwers, K. von.

Bunds, L. A., and San Jose Spray Manufacturing Co., coating particles [of copper sulphate] with inert powder, (P.), B., 126.

Bunel, L. J. See Lobe, L.

Bunker, H. J. See Thaysen, A. C.

Bunte, K., ignition temperature and reactivity of carbonisation products, B., 257.

Buntin, A. P. See Dumanski, A.

Burbridge, W. N., rubber softeners, B., 598.

Burch, C. R., Davis, N. R., and Metropolitan-Vickers Electrical Co., high-frequency electric induction furnace, (P.), B., 636, 757*.
 electromagnetic induction heating, (P.), B., 922.

Burch, C. R. See also Davis, N. R.

Burchart, H., blast-furnace cement, B., 879.
 mortar sands, B., 948.

Burd, J. S., relation of biological processes to concentration of cations in soils, B., 101.

Burd, L. A. See Pucher, G. W.

Burda, J. See Votofek, E.

Burdick, C. L., purifier for [separating suspended particles from] air or gas, (P.), B., 3*.

Burdick, J. N., and Carbide and Carbon Chemicals Corporation, process of making olefin oxides; process of making propylene oxides, (P.), B., 692*.

Burdick, W. L., effect of air in the Jones reducer, A., 706.

Burdon, R. S., spreading of one liquid on the surface of another, A., 348.

Bureau d'Organisation Economique. See Soc. des Ciments Français.

Burgarth, H., valency theory, A., 560.

Burge, W. E., sugar metabolism of unicellular organisms, A., 533.

— catalase content of warm-blooded animals and evergreen trees, A., 541.

Burger, A. W. See British Dyestuffs Corporation, Ltd.

Burger, D., intensity relations of the components of the helium doublets, A., 985.

Burger, G. See Späth, E.

Burgers, F., refining crude iron, (P.), B., 634.

Burgers, F., and Kintzinger, K., direct production of steel or malleable iron from ore, (P.), B., 412.

Burgers, W. G., X-ray examination of *i*-erythritol, A., 339.

— imperfect crystallisation of common camphor, A., 890.

Burgess, A. H., hop investigations; manuring experiments, 1924, B., 102.

[hops]; report on work at [Institute of Brewing's] experimental vats, 1924, B., 103.

Burgess, L., chlorine in the petroleum industry, B., 428*.

Burgess, L., and Barnett, M., production of aluminium chloride, (P.), B., 156.

Burgess, L. J. See Flachschauder, J.

Burgess, M. J., fire-damp explosions; projection of flame, B., 906.

Burgess, M. J., and Wheeler, R. V., limits of inflammability of firedamp and air, B., 114.

— initial decomposition of coal by heat, B., 225.

Burk, action of calcium and magnesium on seedlings of yellow lupin [*Lupinus luteus*], B., 250.

Burk, R. E., possible mechanism for the lowering of the heat of activation of a reaction by a catalytic surface, A., 915.

Burk, R. E. See also Hinshelwood, C. N.

Burke, C. E., Kramer, R. L., and Du Pont de Nemours & Co., E. I., nitrated ester, (P.), B., 935.

Burke, E., influence of nitrate nitrogen on the protein content and yield of wheat, B., 601.

Burke, G. W., nitrate determinations [in water and sewage], B., 359.

Burkhardt, G. N., and Lapworth, A., [with Ashworth, F.], arylsulphuric acids, A., 511.

Burkhardt, G. N., Lapworth, A., and Robinson, E. B., supposed formation of 1 : 2 : 4-oxadil-imine rings from nitroso-compounds and methyleneareylamines, A., 81.

Burkhardt, G. N., Lapworth, A., and Walkden, J., polarity theories and four-membered rings; non-existence of 2 : 3 : 3-triphenylmethylen-1 : 2-oxazine, A., 58.

Burkhardt, H. See Berl. E.

Burkhardt, O. See Freudenberg, K.

Burkheimer, W., Burkheimer process of gas purification, B., 938.

Burley, S. W., kilns for use in cement manufacture, (P.), B., 241.

Burley, W. L., [tunnel] kiln for burning earthenware, (P.), B., 686.

Burlin, A. L., Leicester, S., and Holman, L. B., manufacture of cellulosic material for paper, textiles, and the like, (P.), B., 436.

Burnham Oil Co., Allan, H. L., and Moore, J., wax sweating and crystallising apparatus, (P.), B., 147.

Burmann, J., preparation of a remedy for diabetes, (P.), B., 965.

Burn, J. H., and Marks, H. P., production of sugar in the perfused liver from non-protein sources, A., 1055.

Burnett, W. A. See Cathcart, E. P.

Burnett, W. B. See Adams, R.

Burney, C. D., induction or mineralisation of organic matter, (P.), B., 130, 544.

— manufacture of building materials, (P.), B., 129.

— manufacture of artificial wood [from sawdust and cement], (P.), B., 193*.

Burney, C. D. See also Broadway Trust Co., Ltd.

Burnham Chemical Co. See Gauger, A. W.

Burns, A. C. See Rowe, F. M.

Burns, G. R. See Jones, L. W.

Burns, H. M., and Wood, J. K., behaviour of hydrated chrome oxide towards dyestuffs, B., 625.

— adsorption of methylene blue by zinc oxide, B., 734.

Burns, J. S. See Le Petit, C. J. M. M.

Burn, A. H. See Rowe, F. M.

Burn, (Mrs.) M. S., solvate formation, A., 1207.

Burrage, A. C., jun. See Atlantic Dyestuff Co., and Heuser, R. V. H.

Burrage, L. J., solubility of lead iodide in solutions of sodium chloride at 25°, A., 898.

— equilibrium in systems of the type lead halide-potassium halide-water, A., 908.

Burrell, G. A., Oberfell, G. G., Voress, C. J., and Gasoline Recovery Corporation, extracting vapours from gaseous mixtures, (P.), B., 864.

Burrell, G. A., Seibert, F. M., and Jones, G. W., sampling and examination of mine gases and natural gas, B., 347.

Burrell, G. A. See also Oberfell, G. G.

Burrell & Co., D. H. See Feldmeyer, H.

Burrell & Co., J. equilibrium in the system, $\text{CH}_4 \cdot \text{CO} \cdot \text{Mc} + \text{H}_2\text{O} \rightleftharpoons \text{CH}_4 \cdot \text{OH} + \text{CH}_3 \cdot \text{CO} \cdot \text{H}$, A., 25.

Burrows, G. J., and James, A. E., molecular solution volumes and association, A., 1199.

Burrows, J. A., [with Brown, F. E.], decomposition of potassium chlorate. II. Spontaneous decomposition temperatures using various proportions of manganese dioxide, and of ferric oxide, and of a mixture of manganese dioxide and ferric oxide as catalysts, A., 916.

Burian, V., and Timorev, A., theory of optically active isotropic media, A., 994.

Burstall, F. H. See Morgan, G. T.

Burstein, L. See Roland, R.

Burt, E. J. See Hack, E. B.

Burt-Gerrans, J. T., electrolysis of acid solutions of copper sulphate. II. Constant currents, A., 479.

Burt-Gerrans, J. T., and Hugill, H. R., effect of variation of current and concentration on polarisation in a lead cell, A., 31.

Burt-Gerrans, J. T., and Kerr, R. S., electrical conductivity of magnesia refractories at high temperatures, B., 64.

Burton, E. F., and Reid, (Miss) B. M., determination of size of colloidal particles by means of alternating electric fields, A., 122.

Burton, H., and Gibson, C. S., 10-chloro-5 : 10-dihydrophenarsazine and its derivatives. I. Synthesis preparation, and properties of 10-chloro-5 : 10-dihydrophenarsazine, A., 418.

— 10-chloro-5 : 10-dihydrophenarsazine and its derivatives. II. Action of primary chloroursines on diphenylamine and its homologues, A., 419.

— 10-chloro-5 : 10-dihydrophenarsazine and its derivatives. III. Homologues and amino-, chloro-, and eacodyl derivatives, A., 4162.

Burton, H., Hammond, F., and Kenner, J., mercuriation of *o*-nitrotoluene, A., 966.

Bury, C. R. See Brown, F. S.

Bury, F. W. See Roberts, E.

Busch, E. A.-G. Optische Ind., protective lenses, (P.), B., 783.

Busch, G. See Walden, P.

Busch, H., Schleiermacher's method for measuring thermal conductivity of gases, A., 669.

Busch, M., and Pfeiffer, H., mechanism of the formation of formazyl compounds, A., 831.

Busch, W. See Ruff, O.

Buss, J. See Boyer, M. W.

Busse, W., size-distribution of ions in gases, A., 1074.

Bussino, G. See Careggio, L.

Buston, H. W. See Schryver, S. B.

Buswell, A. M., and Boruff, C. S., sensitivity of the *o*-toluidine and starch-iodide tests for free chlorine [in water], B., 174.

Buswell, A. M., Greenfield, R. E., and Shive, R. A., chemical characteristics of some trade wastes, B., 698.

Buswell, A. M., and Strickhouser, S. I., sewage tank gases, B., 469.

Butcher, B. H., use of chinic [quinic] acid in the differentiation of the *colon-arcuatus* group, B., 390.

Butka, H. E., and Meissner, F. E., urea distillation by the Folin-Wu method, A., 1184.

Butkewitsch, W. S., and Butkewitsch, W. W., Donnan membrane equilibrium in connexion with living cells, A., 208.

Butkewitsch, W. W. See Butkewitsch, W. S.

Butkov, N., refining transformer and turbine oils, B., 1092.

Butler, C. L. See Moureaux, C.

Butler, F. R. See Kohler, E. P.

Butler, J. A. V., co-ordination and co-valency, A., 111, 338*.

— equilibrium of heterogeneous systems including electrolytes. I. Fundamental equations and phase rule, A., 908.

Butler, J. A. V., and Higcock, E. S., solubility of thallous chloride in salt solutions at 0°, 23°, and 60°, and its heats of solution, A., 1200.

Butler, J. A. V., Hugh, W. E., and Hey, D. H., effect of electrode material on oxidation potentials, A., 529, 579*.

Butler, J. A. V. See also Carter, S. R.

Butler, T. H., Robinson, H. W., and Parkes, D. W., production of fuel mixtures, (P.), B., 572, 780*.

Butterley Co., Ltd., and Wright, G. F., apparatus for removing water from coal after washing, (P.), B., 232*.

Butterworth, H. W., & Sons Co. See Bell, W. E. H.

Buttolph, L. J., silica to glass and to metal joints, A., 264.

Buytendijk, E. J. J., and Brinkman, R., reaction course of physiological buffer mixtures examined by direct registration of the p_{H} changes, A., 1220.

Buzagh, A. von, constitution of the system sodium stearate-water, A., 123.

— colloidal solutions of alkaline-earth carbonates. I. A., 469.

— reaction velocity of chloral hydrate and permanganate, A., 1010.

— colloidal solutions of alkaline-earth carbonates. II. Constitution of barium carbonate sol, A., 1096.

Buzzi, G. See Pieroni, A.

Byrd, T. L., micro-Folin-Wu method of blood-sugar determination using 0.1 c.c. of blood, A., 1184.

Byrne, J. F. See Davis, J. D.

Byrnes, C. P., compound metal and method of making it, (P.), B., 63.

Byrnes, C. P. See also James, J. H.

Byron, C. S. See Collens, W. S.

Byron, M. L., peptisation of pyroxylon, A., 905.

Bysov, B. V., hot vulcanisation in air, B., 101, 201*.

C. & C. Developing Co. See Cherry, L. B.

Cabannes, J., and Dufay, J., transparency of the atmosphere to the visible spectrum; molecular diffusion; absorption by ozone, A., 1080.

Cabannes, J., and Granier, J., depolarisation of diffused light by organic substances, A., 559.

Cabell, C. A. See Fink, G. J.

Cable, D. E., McKee, R. H., and Simmons, R. H., soda pulp investigations. I. Yield and quality of pulp as affected by length of chip, B., 1007.

Cable, W. S. See Dales, B.

Cabrera, B., magnetism and the structure of atoms and molecules, A., 7.

Cabrera, B., and Palacios, J., variation of paramagnetism with temperature, A., 892.

Cachemarie, A. S., electric incandescence lamps, (P.), B., 65.

Cade, A. R., and Carbide and Carbon Chemicals Corporation, ethylating amines, (P.), B., 355.

Cadgene, E., textile fabric dyeing machines, (P.), B., 87*.

Cadwell, S. M., and Naugatuck Chemical Co., vulcanising rubber, (P.), B., 138.

— treatment of rubber with aliphatic diamines and their derivatives, (P.), B., 798.

Cagan, S. N., fermentation, A., 1061.

Caglioti, V., new example of anomalous mixed crystals, A., 588.

Cahan, M. H. See Koch, E. M.

Cahen, M. See Brusgesch, T.

Cahn, L. See Magnus, A.

Cahn, R. S., degradative experiments in the morphine group, A., 1264.

Cahn, R. S., and Robinson, R., morphine group. IV. New oxidation product of codeine, A., 745.

Caille, A., particular properties of the sulphuric acid esters of cellulose, B., 355.

Cailliet, E. L. R., and Bourdais, M. L. J., portable ozonizers, (P.), B., 677*.

Cain, J. R., gas analysing method and apparatus, (P.), B., 39.

Caines, C. M., and Evers, N., assay of belladonna leaves, B., 801.

Caird, M. N. See Grimble, F.

Cajar, H., manufacture of printing colours or ink, (P.), B., 333*.

Calcott, W. S., and Du Pont de Nemours and Co., E. I., making lead tetra-alkyl, (P.), B., 76.

Calder, W. A. S. See Chance and Hunt, Ltd.

Caldwell, L., and Celite Co., insulating cement or mortar, (P.), B., 15.

Caldwell, P., and British Cotton and Wool Dyers' Association, Ltd., means for facilitating the mercerisation or like treatment of yarn samples, (P.), B., 437*.

— machines for the dyeing and like treatment of hanks, (P.), B., 628*.

Calico Printers' Association, Ltd., and Farnworth, F., drying, lustring, and finishing machines for fabrics, (P.), B., 11*.

Calico Printers' Association, Ltd., and Lantz, L. A., treatment [mercerisation] of cotton fabrics containing [cellulose acetate] artificial silk, (P.), B., 976.

California Cyanide Co., Inc. See Metzger, F. J., and Poindexter, R. W.

California Spray-Chemical Co., insecticides, (P.), B., 208.

California Walnut Growers' Association. See Christie, A. W.

Calringaert, G., and Davis, D. S., pressure-temperature charts; extended ranges, A., 142.

Calkin, L. P. See Kraemer, A. J.

Callebaut, C., and De Bliequy, J., [machine for] dyeing knitted and woven fabrics, (P.), B., 977*.

Callendar, H. L., King, R. O., and Sims, C. J., dopes and detonation [motor fuels], B., 618.

Callendar, H. L., passification and scale resistance in relation to the corrosion of aluminium alloys, B., 328*.

Callow, A. B., heat-stable peroxydase of bacteria, A., 613.

Callow, E. H., and Hele, T. S., sulphur metabolism of the dog, 111. Effect of benzene and of some derivatives of benzene on sulphur metabolism, A., 862.

Callison, J., and Winthrop Chemical Co., Inc., pharmaceutical product, (P.), B., 464, 805*.

choline compound having laxative properties, (P.), B., 608.

Calorizing Co. See Mantle, G. D.

Calthrop, J. E., effects of torsion on the thermal and electrical conductivities of aluminium with special reference to single crystals, A., 565.

Calvert, R., and Celite Co., siliceous alkaline earth product, (P.), B., 487.

Calverly, H. O., reactions of mercury diphenyl with some acyl halides, A., 629. Preparation of adenosine nucleotide from tea leaves, A., 982.

Calverly, H. O., Noller, C. R., and Adams, R., arsinophenyleinchoninic acid (arsinocinchophen) and derivatives, II., A., 187.

Calvin, D. B. See Hendrix, B. M.

Calvo-Criado, V. See Asher, L.

Camack, J. G. See Austin, J. H.

Cambi, L., supposed nitroprusside of bivalent iron, A., 277.

Cambi, L., and Bozza, G., new method of preparing lead arsenates, B., 191.

Cambridge Instrument Co., Ltd. See Daynes, H. A.

Cambron, A., and Roessler and Hasslacher Chemical Co., accelerator for vulcanisation of rubber, (P.), B., 69.

Cameron, A. E., and Waterhouse, G. B., effects of arsenic on steel, B., 491, 883*.

Cameron, A. T., and Carmichael, J., evaluation of thyroid preparations, B., 897.

Cameron, A. T., and Moorhouse, V. H. K., action of parathyroid extract on blood- and cerebrospinal fluid-calcium, A., 1180.

Cameron, A. T., and Williamson, J. E., preservation of blood samples for analysis, A., 211.

Cameron, A. T. See also White, F. D.

Cameron, C. N., action of aniline on dextrose in acetic acid solution. I. and II., A., 1026, 1228.

Cameron, G. E., enzymes of the hydatid cyst, A., 752.

Cameron, W., and Simplex Refining Co., dehydrating [oil] emulsions, (P.), B., 431*.

Cameron, W. H. B., production of some spectra of carbon, oxygen, and nitrogen in the presence of neon, A., 333.

Camichel, C., Espande, L., and Ricaud, M., viscosity and turbulence, A., 571.

Cammack, M. L. See Sherman, H. C.

Campardou, J., simple gas generator, A., 492.

Campbell, A. N., occurrence of divi-manganese (atomic number 75) in manganese salts, A., 37.

direct oxidation of manganese ion to permanganate, A., 366, 583*.

anodic behaviour of ferro-manganese, A., 1106.

Campbell, A. W. See Eddy, E. D.

Campbell, C., and Dixon, H. B., explosion-wave in cyanogen mixtures, and specific heats of nitrogen, A., 1213.

Campbell, D., and Geiling, E. M. K., labile sulphur in the blood, A., 1165.

Campbell, D., and Snodgrass, W. R., iodine content of human cerebrospinal fluid, A., 858.

Campbell, D. F., high-frequency induction furnace, B., 164*.

Campbell, D. F., Gifford, W. S., and Hirsch, Kupfer & Messingwerke A.-G., tilting [smelting] furnaces, (P.), B., 64*.

Campbell, E. D., correlation of the remanent magnetism and specific resistance of some pure iron-carbon alloys, A., 17, 340*.

Campbell, E. D., and Mohr, H. W., specific resistance and thermoelectric potential of steels differing only in carbon content, A., 566, 1086*.

Campbell, E. D., and Ross, J. F., chromium-iron equilibrium in carbides recovered from annealed 2-23% chrome steels, B., 132*.

Campbell, E. D. See also Fink, W. L.

Campbell, F. L., practicability of quantitative toxicological investigations on mandibulate insects, B., 506.

role of calcium hydroxide in hydrated lime-acid lead arsenate sprays, B., 506.

Campbell, J. A., normal carbon dioxide and oxygen tensions in the tissues of various animals, A., 537.

ultra-violet radiation and metabolism with a new method of determining metabolism, A., 755.

Campbell, J. D. See Dunlop Rubber Co., Ltd.

Campbell, K., natural colour cinematography, (P.), B., 77.

Campbell, N. R., evacuation of carbon dioxide and water, A., 570.

variation of pressure with temperature in evacuated vessels, A., 894.

Campbell, R., Haworth, R. D., and Perkins, W. H., jun., isoquinoline group. VI. Synthesis of derivatives of parabrine, A., 303.

Campbell, T. P., purification of zinc solutions, (P.), B., 674.

Campbell, W. H., production of fermentable worts, (P.), B., 509*.

Campbell, W. R., quantitative determination of dihydroxyacetone, A., 443.

Campbell, W. R., Fletcher, A. A., Hepburn, J., and Markowitz, J., dihydroxyacetone metabolism, A., 1272.

Campbell, W. R., and Hanna, M. I., determination of levulose, sucrose, and inulin, A., 1231.

Campbell, W. R., and Hepburn, J., effect of dihydroxyacetone on insulin hypoglycaemia, A., 979.

Canadian Electro Products Co. [motor] fuel, (P.), B., 430.

Canadian Press-Air, Ltd., Johnston, H. W., and Pope, E. J., production of carbon dioxide and nitrogen compounds [ammonia], (P.), B., 666.

Canal, H. See André, E.

Cannan, R. K., electrode potentials of hermidin, the chromogen of *Mercurialis perennis*, A., 1183.

Cannan, R. K., Cohen, B., and Clark, W. M., oxidation-reduction. X. Reduction potentials in cell suspensions, A., 1009.

Cannan, R. K. See also Gibbs, H. D.

Canneri, G., double sulphates and chromates of guanidine and bi- and ter-valent metals, A., 55.

tungsten-anodo-arsenates, II., A., 255.

rare earth borates and phosphates, A., 1112.

Canning, T. F., and Clark, R. O., machines for charging and discharging gas retorts, (P.), B., 12*.

Cannon, H. B., ovens or furnaces, (P.), B., 424.

Cano, V., apparatus for heating, cooking, or drying materials, (P.), B., 808.

Cantarow, A., Caven, W. R., and Gordon, B., changes in the blood following administration of parathyroid hormone, A., 1279.

Cantelo, R. C., thermal decomposition of methane, II., A., 798.

Canter, V. C. See Vorres, C. L.

Canton, O., analysis of silicates, B., 359.

titration of arsenious acid with permanganate, B., 663.

determination of the calorific power of benzine, B., 860.

Capelle, J. L., electrical resistors, (P.), B., 66.

Capelli, G., identification of lactic acid and its detection in gastric juices, A., 632.

Capicott, J. V. See Dubilier Condenser Co. (1925) Ltd.

Cappel, P. B. See Griffith, W. H.

Cappelen, L., and Noyons, A. K., open gas analytical method for metabolic measurements, A., 1067.

Capper, N. S., and Marsh, J. K., light absorption and emission phenomena in absorption spectra of condensed nuclear hydrocarbons, A., 557.

Capstan, J. G., and Eastman Kodak Co., [photographic] reversal process, (P.), B., 219, 1030*.

Capstick, J. W. See Wool, T. B.

Carani, N. See Vecchietti, L.

Carbide and Carbon Chemicals Corporation, making crotonaldehyde, (P.), B., 76.

recovery of readily liquefiable constituents [gasoline] from hydrocarbon gas mixtures, (P.), B., 154*.

Carbide and Carbon Chemicals Corporation. See also Brooks, B. T., Burdick, J. N., Cade, A. R., Compton, J. N., Hertly, C. J., Lommen, F. W., Ray, A. B., and Webb, W. R.

Carborundum Co., artificial stone for abrasive and other purposes, (P.), B., 918*.

Carborundum Co. See also Hartmann, M. L., and Johnson, B. M.

Careggio, L., and Bussino, G., determination of chromic oxide in chrome leather, B., 716.

Cario, G., and Franck, J., quenching of the resonance fluorescence of mercury by the addition of gases, A., 776.

Carlton, P. W. See Adamson, W. A.

Carli, E. See Oliveri-Mandala, E.

Carlier, P. See Delaville, M.

Carline, J. C., means of pulverising, and separating, all kinds of cereals, minerals, etc., (P.), B., 112.

Carlsson, H., additivity of the m. p. of compounds, A., 1087.

Carlsson, H. See also Hantzsich, A.

Carlsson, V. See Eddy, W. H., and Kohman, E. F.

Carman, G. G. See Mitchell, H. H.

Carmichael, J. See Cameron, A. T.

Carnochan, R. K. See Timms, W. B.

Caro, N., and Frank, A. R., production of pure nitrogen from combustion gases, (P.), B., 157.

acceleration of the oxidising or condensing reactions occurring in the preparation of nitric acid from nitrous gases, (P.), B., 405.

preparation of cyanides from cyanamide salts, (P.), B., 406.

Carrobi, G., isomorphism between samarium compounds and the corresponding compounds of calcium, strontium, barium, and lead, A., 14.

chemical composition of orthite from Ambatofotsikely (Madagascar), A., 709.

double chromates of rare-earth metals with the alkali metals. II. Lanthanum and ammonium, A., 810.

Carrobi, G., and Marcolongo, A., isomorphic relations between metals of the mercury and magnesium groups. I. Isomorphism of mercury and magnesium, A., 782.

Carrobi, G., and Restaino, S., synthetic pyromorphites, vanadinites, and mimetites, in which the lead is partly substituted by metals of the laethanum series, A., 811.

Carrobi, G. See also Zambonini, F.

Carothers, W. H., and Jones, G. A., preparation of some primary amines by the catalytic reduction of nitriles, A., 161.

Carozzi, E., mercury oxychlorides: $2\text{HgCl}_2, \text{HgO} \text{ and } \text{HgCl}_2, \text{HgO}$, A., 782.

isomorphous relations between the double cyanides, $\text{K}_2\text{Zn}(\text{CN})_4, \text{K}_2\text{Cd}(\text{CN})_4$, and $\text{K}_2\text{Hg}(\text{CN})_4$, A., 782.

Carpanese, T., epidote of Monte Rosso di Verra (Monte Rosa group), A., 143.

Carpenter, C. C., and Willard Storage Battery Co., electrolyte for electrolytic [rectifying] cells, (P.), B., 1019.

Carpenter, D. C., effect of μ and of temperature on hydrolysis of cascinoen, A., 631.

Carpenter, H. B., horizontal coke oven, (P.), B., 477.

Carpenter, H. C. H., production of single crystals of metals and their properties, B., 792*.

Carpenter, J. A., properties of paraffin wax, B., 731.

Carpenter, M. S. See Ekeley, J. B.

Carpenter, S. W., and White, G. N., binder [for fuel briquettes], (P.), B., 146.

Carpents, T. M., and Fox, E. L., apparatus for determination of methane in metabolism experiments, A., 1184.

Carpenter, W. M., production of aqueous solutions or dispersions of isinglass, (P.), B., 989.

Carpenter, G. See Brigaudet.

Carzow, J. B. See Chemische Fabrik Heppes & Co.

Carr, E. P., and Dobrow, M. A., absorption spectra of some derivatives of anisylidenehydantoin, A., 180.

Carr, F. H., and Price, E. A., colour reactions attributed to vitamin-A, A., 870.

Carr, W. M. See Aldridge, J. G. W.

Carrahan, G. H., Zeeman effect for the spectrum of fluorine, A., 987.

Carrara, G., catalysts for the synthesis of ammonia, (P.), B., 155.

Carra, G. See also Freudenberg, K.

Carre, M. H. See Emmett, A. M.

Carrick, C. W. See Haage, S. M.

Carrier, W. H., and Carrier Engineering Corporation, Ltd., refrigerating system, (P.), B., 145*.

Carrier Engineering Corporation, Ltd., and Robertson, K. J. R., evaporation or insuspension of solutions, (P.), B., 304.

Carrier Engineering Corporation, Ltd. See also Carrier, W. H.

Carrière, E., nitration of cellulose; [cellulose pernitrates], A., 503.

Carrière, J. P., surface properties of soap solutions; structure of the fluid surface, B., 332.

detection of linseed oil in soya-bean oil, B., 678.

Carrington, J. H., Hickson, L. R., and Patterson, W. H., relationship of salts in dilute aqueous solution as determined by their influence on the critical solution temperature of the system phenol-water, A., 18.

Carroll, B. H., photochemical oxidation of leuco-bases, A., 253.

Carroll, H. L., continuous process for refining petroleum, (P.), B., 478.

Carroll, J. A., vacuum spark spectra of some of the heavier elements, and series classification in the spectra of ionised atoms homologous with copper, silver, and gold, A., 214.

Carroll, M. F., molecular association and the equation of state, A., 894.

Carroll, R. A., and Elliott, H. L., motor fuel, (P.), B., 699.

Carroll, S. J., and Eastman Kodak Co., cellulose acetate composition, (P.), B., 48.

cellulose acetate film composition, (P.), B., 315.

cellulose nitrate composition, (P.), B., 633.

Carroll, S. J. See also Malone, J. B.

Caruthers, A. See Anderson, A. B.

Carson, C. M., basic stannous sulphate, A., 587.

Cast, (Fr.) A. See Ladenburg, R.

Castens, C. E. See Frick, F. F.

Castwell, T. S., fractionating column calculations, B., 343.

Carter, A. S. See Krauskopf, F. C.

Carter, B. C., centrifugal separators, (P.), B., 968.

Carter, C. B., Coxe, A. E., and Karpen & Bros., S., production of phenol-methyl resin, (P.), B., 202.

manufacture of alcohols, (P.), B., 217.

producing chloro-derivatives of methane, (P.), B., 420.

Carter, C. B., and Karpen & Bros., S., producing a phenolic condensation product, (P.), B., 202.

producing methylal, (P.), B., 217.

Production and purification of hexamethylenetetramine; recovery of hexamethylenetetramine from mixtures containing ammonium chloride; production of hexamethylenetetramine and ammonium chloride, (P.), B., 217.

Carter, G. D., fifty years of development of compressed gases, B., 807*.

Carter, G. D., soluble silicates; their influence on hypochlorite bleach, B., 357.

Carter, J. S., salting out effect; influence of electrolytes on solubility of iodine in water, A., 236.

Carter, J. S. See also Dawson, H. M.

Carter, P. G., and Read, J., derivatives of 1: 1'-bismenthone, A., 409.

examination of some Rhodesian eucalyptus oils, B., 76.

Carter, P. G., Smith, H. G., and Read, J., action of phosphoric acid on certain terpenes and related compounds, B., 75.

Carter, R. M., loss of free iodine from alcoholic solutions of varying purity and the effect of potassium iodide, B., 849.

Carter, S. R., physico-chemical and electrochemical aspects of sulphur dioxide as an oxidising agent, B., 664.

Carter, S. R., Butler, J. A. V., and James, F., oxidation potential of the system selenium dioxide-selenium, A., 687.

Carter, S. R., and Hartshorne, H. H., system ferrous oxide-phosphoric acid-water and some of its oxidation products, A., 358.

Carter, S. R., and Lea, F. M., liquid boundaries and diffusion potentials, A., 688.

Carter, S. R. See also Morgan, G. T.

Carter, W. C., method of impregnating cellulose fibres, (P.), B., 975.

Cartland, G. F., and Hart, M. C., corpus luteum. IV. Acetone-soluble fat, A., 424.

Carver, E. K. See Sheppard, S. E.

Carver, F. S., presses for expressing oils or other liquids from materials, (P.), B., 795*.

Casaburi, V., liming with sulphide, B., 957.

Casale, L., production of urea [carbamide], (P.), B., 27.

Process for catalytically preparing methanol [methyl alcohol] or higher alcohols or other oxygenated organic compounds or mixtures, (P.), B., 692.

Casares, R., molecular mechanics, A., 338.

Casas, F. H., derivatives of *p*-hydroxymethylbenzoic acid. II. Ether esters, A., 166.

derivatives of *p*-hydroxymethylbenzoic acid. III. Amino-esters, A., 166.

Caso, G. O. See Novocerates, Ltd.

Caselin Manufacturing Co. See Dunham, A. A.

Casey, M. T., temperature control for refractometers and polarimeters, A., 1118.

Cason, D. K., jun., electrical dehydrator [for crude oil], (P.), B., 525.

Casper, C. H., dealcoholisation of beverages, (P.), B., 993.

Casper, F. See Gelsenkirchener Bergwerks-A.-G., Abteil. Schalke.

Casper, H. See I. G. Farbenind., A.-G.

Casper, W. A., crystal structure of pyrocatechol, A., 460.

Casper, J. See Meisenheimer, J.

Cassal, A. See Job, A.

Cassel, H., method of reducing the corrosion of water conduits consisting of pipes of two different metals, B., 95.

heat of adsorption and surface tension, A., 127.

Cassella & Co., L., manufacture of benzanthrone derivatives, (P.), B., 659*.

arsenic compounds [arsenoxides] of the aromatic series, (P.), B., 932.

manufacture of new organic phosphorus compounds, (P.), B., 936.

Cassella & Co., L., and Benda, L., benzoxazolone-5-arsenic acid, (P.), B., 28*.

Cassella & Co., L., Benda, L., and Sievers, O., production of acridinium compounds, (P.), B., 460*.

Cassella & Co., L., Kalischer, G., and Keller, K., production of azo-dyes soluble in water, (P.), B., 44.

formation of pigment azo-dyes on vegetable fibres, (P.), B., 536.

Cassella & Co., L., Kalischer, G., Müller, R., and Frister, F., production of benzanthrone derivatives, (P.), B., 434.

Cassella & Co., L., and Kohl, F., dyeing leathers tanned differently from glucose leather, (P.), B., 318.

Cassens, B., motion of ions in liquids, A., 1104.

Casady, G. J., Dworkin, S., and Finney, W. H., action of insulin on the domestic fowl, A., 436.

Cassidy, J. H. See Ballman, E. C.

Castan, P., and Ficet, A., hexahexosan and trihexosan, A., 52.

Castille, A. See Bruylants, P.

Castilla, W. B. See Himwich, H. E.

Castro-Girona y Pozurama, A. See Gaspar y Arnal, T.

Caswell, A. E., thermo-electric properties of pure metals and alloys, A., 1196.

Catalán, M. A., structure of the spectra of elements of the iron series, A., 1.

Catalán, M. A. See also Bechert, K.

Cathala, J., photochemical synthesis of hydrochloric acid, A., 252, 484.

rôle of water vapour in the photosynthesis of hydrogen chloride, A., 585.

Cathala, J. See also Matignon, C.

Cathcart, E. P., and Burnett, W. A., influence of muscle work on metabolism in varying conditions of diet, A., 755.

Catlin, L. J., cresylic acid from petroleum distillates, B., 693.

Catlin, R. M., and Catlin Shale Products Co., distillation of carbonaceous material, (P.), B., 118*.

Catlin Shale Products Co. See Catlin, R. M.

Cattelain, E., hydrazine sulphate as a standardising reagent for iodine solutions, A., 489.

titration of solutions of iodine by means of hydrazine sulphate, A., 1115.

Caunce, A. E. See Pickard, R. H.

Cauquil, (Mile) G., esterification of cyclohexanol and some of its homologues. I. Viscosity, surface tension, and thermochemistry, A., 914.

Cavel, L., loss of nitrogen on purification of sewage water by the activated sludge method, B., 110.

Caven, R. M., and Johnston, W., systems nickel sulphate-potassium sulphate-water, zinc sulphate-potassium sulphate-water, and manganese sulphate-potassium sulphate-water at 25°, A., 1210.

Caven, R. M., and Mitchell, T. C., system silver sulphate-aluminium sulphate-water at 30°, A., 26.

equilibrium in systems of the type $\text{Al}(\text{SO}_4)_2 \cdot \text{M}'\text{SO}_4 \cdot \text{H}_2\text{O}$. II. Aluminium sulphate-nickel sulphate-water at 30°, A., 26.

pseudo-alums, A., 255*.

Caven, W. R. See Cantarow, A.

Cazzand, R., self-magnetisation of steels under torsion, B., 277.

Cazzani, U., determination of arsenic and silver in silver arsenobenzenes, B., 107.

Cazzani, U. See also Contardi, A.

Cecchetti, B. See Rossi, G.

Cederberg, I. W., manufacture of nitric acid from the nitrous gases arising during the catalytic combustion of mixtures of ammonia and oxygen, (P.), B., 359.

Cederberg, I. W., Fjellanger, M., Gruner, V., and Norsk Hydro-Elektrisk Kvaalstof-aktieselskab, catalyst for synthesis of ammonia, (P.), B., 666*.

Cederberg, I. W., and Norsk Hydro-Elektrisk Kvaalstof-aktieselskab, production of catalysts for the synthesis of ammonia, (P.), B., 236.

Celite Co., refractory heat insulating material, (P.), B., 790*.

Celite Co. See also Boeck, P. A., Caldwell, L., Calvert, R., Eisenbast, A. S., Endres, H. A., Irvin, W. T., Teitworth, C. S., Thatcher, H. S., and Zoul, C. V.

Cella Drähtwerk G.m.b.H., production of oven-drying lacquers, (P.), B., 838.

Centnerszwer, M., and main and subsidiary groups of the periodic system, A., 662.

Centnerszwer, M., and Awerbuch, A., velocity of decomposition of solids. IV. Rate of dissociation of lead carbonate, A., 1107.

Centnerszwer, M., and Bruz, B., velocity of decomposition of solids. II. Rate of dissociation of cadmium carbonate, A., 581.

velocity of decomposition of solids. III. Rate of dissociation of silver carbonate, A., 1107.

Centnerszwer, M., and Straumanis, M., does radium exert an influence on the potential of the hydrogen electrode?, A., 129.

catalytic phenomena when zinc is dissolved in acids, A., 131.

overpotential of hydrogen on finely-divided metals and its connexion with the catalytic influence of metals on the solution of zinc, A., 131.

Centnerszwer, M., and Zablocki, W., rate of solution of aluminium, A., 1010.

Cerasoli, E., utilisation of molasses spent wash as a nitrogen-potash fertiliser, B., 562.

Cerecedo, L. R. See Adelina, M., and Muenzen, J. B.

Cerezco, J. See Pascual Vila, J.

Cerigheili, R., influence of media on germination of seeds in absence of calcium, A., 99.

influence of light and temperature on the germination of seeds in the absence of calcium, A., 438.

Ceriotti, A., and Sanquineti, A., free acids of edible oils [olive oil], B., 757.

Ceva, U. See Toja, V.

Ceylon Rubber Research Scheme, London Committee, artificial ageing tests on plantation rubber, B., 838.

Chaborski, (Mile) G. See Longinescu, G. G.

Chabot, G., volumetric determination of alcohol, B., 210.

determination of starch by calcium chloride, B., 642.

Chadburn, W. R. See De Laval Chadburn Co., Ltd.

Chaderton, E. See Radcliffe, L. G.

Chadeloid Chemical Co. See Ellis, C.

Chadwell, H. M., viscosities of aqueous solutions of organic substances and the polymerisation of water, A., 1006.

Chadwick, H. See Holroyd, G. W. F.

Chadwick, J., artificial disintegration of elements, A., 1191.

Chadwick, J., and Emeléus, K. G., γ -rays produced by α -particles in different gases, A., 220.

Chadwick, V. R. See Forgan-Potts, J.

Chahovich, X. See Ginja, J.

Chaihoff, J. L., supposed influence of insulin on sugar formation in the liver, A., 1063.

Chaihoff, J. L., Macleod, J. J. R., Markowitz, J., and Simpson, W. W., depancreatised dogs before and after the withdrawal of insulin, A., 643.

Chaihoff, J. L. See also Gee, A. H.

Chajkin, L. See Fromm, E.

Chakladar, M. N. See Guha, P. C.

Chakravarti, D. N., and Dhar, N. R., viscosity of some sols in presence of potassium chloride, A., 677.

Chakravarti, D. N. See also Ghosh, S.

Chalas, A., and Chalas, E., soluble food product, having fresh kola as base, (P.), B., 213.

Chalas, E. See Chalas, A.

Chalk, M. L. See Foster, J. S.

Challenger, F., Haslam, J., Bramhall, R. J., and Walkden, J., sulphur compounds of Kimmeridge shale oil, B., 617.

Challenger, F., Peters, A. T., and Halévy, J., introduction of the selenocyanogroup into aromatic compounds, A., 965*.

Chambard, P. See Meunier, L.

Chamberlain, R., fine structure of certain X-ray absorption edges, A., 2.

Chamberlain, K., and Lindsay, G. A., determination of certain outer X-ray energy levels, A., 1072.

Chamberlain, N. H., Hume, J., and Topley, B., hydrates of manganous oxalate, A., 1209.

Chambers, E. K., and Thompson, K. W., quantitative changes in tissue glycogen, blood sugar, plasma, inorganic phosphates, and in blood lactic acid in canine histamine shock, A., 318.

Chambers, P. See Fisher, W. H.

Chambers, R., and Reznikoff, P., cell physiology. I. Action of the chlorides of sodium, potassium, calcium, and magnesium, on the protoplasm of *Amoeba proteus*, A., 759.

Chambers, R. P., and Scherer, P. C., phenyl tin compounds, A., 629.

Chambers, W., crushing or grinding apparatus, (P.), B., 645.

Chambers, W. H., and Coryrols, P. N., blood-sugar and urinary dextrose: nitrogen ratio following pancreatectomy, A., 1270.

Chambige, P. R., product for impregnation of wood, (P.), B., 409*.

Chambret, F. See Grignard, V.

Chamie, (Mlle.) C., ionisation produced by the hydration of quinine sulphate, A., 910.

Chamie, (Mlle.) C. See also Gloditsch, (Mlle.) E.

Chamot, E. M., and Cole, H. I., microchemical detection of germanium, A., 1019.

Chamot, E. M. See also Mason, C. W.

Chance, T. M., separating materials of different specific gravities, (P.), B., 33.

method for producing fluid mediums of high density, (P.), B., 33.

Chance Bros. & Co., Ltd., Gell, P. V. W., Gould, C. E., Hampton, W. M., and Martin, H. S., colourless Crookes' glass, (P.), B., 878.

Chance and Hunt, Ltd., and Calder, W. A. S., separating solid particles from gases, (P.), B., 648.

Chance and Hunt, Ltd. See also Giddens, W. T.

Chandler, E. F., fuel for internal combustion engines, (P.), B., 863.

Chandler, E. F. See also Taylor, E.

Chaney, M. S., and Blunt, K., effect of orange juice on calcium, phosphorus, magnesium, and nitrogen retention, and on urinary organic acids of growing children, A., 437.

Chaney, W. See Neath, J.

Channon, H. J., biological significance of the unsaponifiable matter of oils. I. [Feeding] experiments with squalene (spinacene), A., 638.

Channon, H. J., and Harrison, G. A., subcutaneous fat in the normal and sclerato-ataxic infant, A., 425.

Channon, H. J., and Marrian, G. F., biological significance of the unsaponifiable matter of oils. II. Unidentified unsaturated hydrocarbon present in mammalian liver, A., 638.

Channon, H. J. See also Drummond, J. C.

Channin, A., fate of creatine in the human organism, A., 429.

Chapelle, R. A. H. P., carbonisation of wood, (P.), B., 182.

Chapman, A. C., detection and determination of glycerol in tobacco, B., 891.

Chapman, A. C., and Penderleith, H. J., examination of ancient Egyptian (Tut-ankh-Amen) cosmetic, B., 986.

Chapman, A. W., isomeric change in aromatic compounds. I. Conversion of diarylanilines into acylaminoketones, A., 161.

imino-aryl ethers. IV. Reversible migration of an aryl group, A., 1138.

Chapman, C. W., crystallisation and specific rotation of ovalbumin and an attempt to crystallise lactalbumin, A., 189.

Chapman, D. L., conclusions from recent work on photochemistry, A., 583*.

Chapman, D. L., Goodman, R. A., and Shepherd, R. T., direct synthesis of nitrous oxide, A., 811.

Chapman, D. L. See also Briers, F.

Chapman, R. N., and Johnson, A. H., chloropicrin as a fumigant for cereal products, B., 338.

Chapman, S., Topping, J., and Morrall, J., electrostatic potential energy, and rhombohedral angle, of carbonate and nitrate crystals of calcite type, A., 664.

Chapman, W. R., determination of unburnt carbon from the analysis of flue-gases, B., 347.

Part process of low-temperature carbonisation of coal, B., 905.

Chapman, W. R., and Mott, R. A., cleaning of coal. I., II., and III., B., 473, 569.

Chapman, W. R., and Wheeler, R. V., propagation of flame in mixtures of methane and air. IV. Effect of restrictions in the path of the flame, B., 970.

Chappell, E. L. See Whitman, W. G.

Chappell, M. L., and Standard Oil Co., treating [spent] decolorising and clarifying hydrous magnesium silicate, (P.), B., 120.

Chappell, M. L. See also Faber, J. F.

Charaux, C., melilotoside, the glucoside from which is formed coumaric acid, extracted from the flowers of *Melilotus altissima* and of *M. arvensis*, A., 99.

biochemical hydrolysis of robinoside (robinine); robinose, a new triose, A., 1183.

Charaux, C., and Delaunay, P., presence of lorogloside (loroglossin) in *Listera ovata*, R. Br., and *Epipactis palustris*, Crantz, A., 210*.

Charaux, C. See also Bridel, M.

Charach, W. H., Mack, B., jun., and Boord, C. E., antiknock materials, B., 570.

Charisius, K. See Benary, E.

Charles. See Randolph, L.

Charles, G. H., and United Alloy Steel Corporation, resistant surface alloy of iron, (P.), B., 17.

Charlton, E. E. See British Thomson-Houston Co., Ltd.

Charlton, W. Haworth, W. N., and Peat, S., revision of the structural formula of dextrose, A., 273.

Charonat, R., complex compounds of ruthenium chlorides, A., 37.

Charrier, G., and Beretta, A., α -aminoazo-compounds and 1:2:3-acenaphthiazoles, A., 307.

Charrier, G., and Beretta, A., [with Gisella, A.], isomeric phenyl- α -naphthatriazolequinones, A., 843.

Charrier, G., and Crippa, G. B. [with Danzi, A.], oxidation of α -amioarylazobenzenes in acetic acid solution by means of hydrogen peroxide, A., 845.

Charrier, G., and Manfredi, A. [with Gorini, L.], 2-phenyl- α -naphthatriazolequinone, A., 848.

Charrión, A., adsorption of dissolved substances. I., A., 899.

adsorption of dissolved substances. II. (i) Separation of adsorbed substance from adsorbent. (ii) Reciprocal displacement of adsorbed substances.

(iii) Catalytic activity of adsorbed substances, A., 1200.

Charton, E., and Mongereau, P. M., pulverising machine, (P.), B., 696*.

Chassevent, L., calcium sulphate. I. Action of water, A., 1217.

Chastellain, F., determination of ammoniacal nitrogen in fertilisers, B., 505.

Chataway, H. D. See Whitby, G. S.

Chatfield, C., proximate composition of beef, B., 1037*.

Chatillon, A., magnetic states of cobalt chloride, A., 566.

Chatillon, M., effect of temperature on the paramagnetism of cobalt salts in solution, A., 14.

Chataway, F. D., condensation of phenols with chloral, A., 1212.

Chataway, F. D., and Coulson, E. A., nitration of benzil, A., 728.

Chataway, F. D., and Parkes, G. D., substituted dihydroptazaines; new series of cyclic nitrogen compounds, A., 308.

Chataway, F. D., and Walker, A. J., substituted 4-diazomethanes, A., 169.

Chatterji, A. C., and Dhar, N. R., formation of Liesegang rings and peptising effect of gels, A., 1202.

condition of silver chromate in gelatin from electric conductivity and diffusion experiments, A., 1203.

Chatterji, N. G., and Finch, G. I., circulation apparatus for gases, A., 41.

oxidation of linseed and cottonseed oils, B., 923.

Chandhury, S. G. See Mukherjee, J. N.

Chaudron, G. See Blanc, L., and Forestier, H.

Chaudron, (Mlle.) A. See Colin, H.

Chauamat, H., active charcoal, B., 521.

Chaux, R. See Durraisse, C.

Chavany, J. See Pilet, A.

Chavanne. See Arloing, F.

Chavanne, G., inactive 1:3-dimethylcyclopentane, A., 1130.

Chavanne, L., heat interchanging apparatus, (P.), B., 808*, 967.

Chavastelon and Elouard, Adam's method of fat determination in milk, B., 609.

Chemical Construction Co. See Hechenbleikner, I.

Chemical Engineering Co. (Manchester), Ltd., Spensley, J. W., and Battersby, J. W., separation of oils or fats [from blubber and oil-bearing tissues of marine animals], (P.), B., 20.

separation of fats from animal tissues, (P.), B., 20.

Chemical Foundation, Inc. See Joyce, A. W.

Chemical Treatment Co., Inc. See Fink, C. C.

Chemical Works (formerly Sandoz), and Böniger, M., manufacture of diazotisable azo-dyes and intermediate products, (P.), B., 657.

Chemical Works (formerly Sandoz), and Suter, E., heart-affecting pure glucoside from *Bulbus scilla*, (P.), B., 466*.

Chemical Works Flora. See Corti, A.

Chemische Fabrik auf Aktien (vorm. E. Schering), preparing esters of carbithionic acids and thiocarboxylic acids of the pyrazolone series, (P.), B., 141.

preparation of ketones of the pyridine series, (P.), B., 216.

manufacture of a new iodine substituted oxindole, (P.), B., 514.

manufacture of poly-iodine substituted isatins, (P.), B., 514.

manufacture of aluminium ethylate [ethoxide], (P.), B., 691.

manufacture of silica gel, (P.), B., 744.

manufacture of solid products containing nicotine, (P.), B., 893.

dehydrating formic acid, (P.), B., 931.

manufacture of colourless products of [the reaction of] dialkylbarbituric acids with 4-dimethylamino-1-phenyl-2:3-dimethyl-5-pyrazolone, (P.), B., 331.

manufacture of esters of bornol and isoborneol, (P.), B., 932, 995.

manufacture of lactic acid esters, (P.), B., 1028.

Chemische Fabrik auf Aktien (vorm. E. Schering), Dohrn, M., and Zöllner, C., preparation of 2-phenyl-4-aminooxyquinolone, (P.), B., 335.

Chemische Fabrik auf Aktien (vorm. E. Schering), Freund, E., and Jordan, H., preparation of resinous or plastic masses, (P.), B., 100.

production of viscous or resinous masses, (P.), B., 100.

resin substitute produced by Friedel-Crafts reaction, (P.), B., 203.

Chemische Fabrik auf Aktien (vorm. E. Schering), Görnitz, K., and Goebel, H., material for combating plant and animal pests, (P.), B., 209.

Chemische Fabrik auf Aktien (vorm. E. Schering), and Hallstein, A., conversion of methyl sulphide into carbon tetrachloride and other chlorinated compounds, (P.), B., 28, 173.

improving the odour of methyl sulphide, (P.), B., 173.

Chemische Fabrik auf Aktien (vorm. E. Schering), and Jordan, H., manufacture of hydrogenated di[hydro]xydiphenylmethane compounds, (P.), B., 720.

Chemische Fabrik auf Aktien (vorm. E. Schering), and Klapake, W., manufacture of silica gel, (P.), B., 437.

Chemische Fabrik auf Aktien (vorm. E. Schering), Schoeller, W., and Börgwardt, E., preparation of [A] 4-amino-2-bismuthimercaptobenzoic acid, and [B] 4-amino-2-cupromercaptobenzoic acid, (P.), B., 899.

Chemische Fabrik auf Aktien (vorm. E. Schering), Schoeller, W., and Dirkson, R., preparation of complex metal-gelatoles, (P.), B., 771.

Chemische Fabrik auf Aktien (vorm. E. Schering), Schoeller, W., and Schmidt, Kurt, monooiodo-oxindole and process of making it, (P.), B., 646*.

preparation of 5:7-di-iodoindole-3-acetic acid and its homologues, (P.), B., 852.

preparation of oxindole-3-acetic acid, (P.), B., 870.

Chemische Fabrik auf Aktien (vorm. E. Schering), and Thiele, A., pharmaceutical product; [compound of phenylethylbarbituric acid and 4-dimethylamino-1-phenyl-2:3-dimethyl-5-pyrazolone], (P.), B., 615*.

Chemische Fabrik auf Aktien (vorm. E. Schering). See also Thiele, A.

Chemische Fabrik K. Albert, Amann, A., and Fonrobert, E., producing resinous substances, (P.), B., 938.

Chemische Fabrik Buckau. See Müller, E.

Chemische Fabrik Coswig-Anhalt G.m.b.H., and Dieterich, W. von, production of strontium oxide from strontium carbonate, (P.), B., 13.

Chemische Fabrik Flora, preparation of a complex thorium compound of the reaction product of tyrosine and formaldehyde, (P.), B., 464.

Chemische Fabrik Gauß G.m.b.H., and Berndt, M., preparation of stable solutions of therapeutic value, containing calcium and silicon compounds and suitable for injection, (P.), B., 217.

Chemische Fabrik Griesheim-Elektron, production of aluminium chloride and alumina, (P.), B., 12.

production of practically iron-free alumina, (P.), B., 51.

purifying agent for acetylene, (P.), B., 262.

production of phosphoric acid, (P.), B., 273.

obtaining fat from fat-bearing vegetable rinds, (P.), B., 333.

preparation of pure aluminium sulphate, (P.), B., 360.

[Preparation of] silicotungstates and fluorides, (P.), B., 360.

separation of vegetable fibres in the manufacture of cellulose, (P.), B., 401.

manufacture of new azo-dyes and intermediate products, (P.), B., 432.

manufacture of basic dyes of the malachite green series, (P.), B., 577.

Chemische Fabrik Griesheim-Elektron, production of phosphoric acid anhydride, (P.), B., 634*. manufacture of polyazo-dyestuffs, (P.), B., 626*. manufacture of monoazo-dyestuffs or intermediate compounds for manufacture of disazo- or polyazo-dyestuffs, (P.), B., 703. manufacture of dyestuffs of the triphenylmethane series, (P.), B., 815. azo-dyes, (P.), B., 860. production of soluble fluorides, (P.), B., 979.

Chemische Fabrik Griesheim-Elektron, and Beck, A., recovering light metals from scrap, (P.), B., 331*. casting [easily oxidisable] metals, (P.), B., 549*. Chemische Fabrik Griesheim-Elektron, and Goudier, K. L., simultaneous production of barium chloride and sulphur chloride, (P.), B., 53. Chemische Fabrik Griesheim-Elektron, and Gürlicher, J., azo-dyes stable in steam from nitrosoamine colours, (P.), B., 318.

Chemische Fabrik Griesheim-Elektron, and Hermann, A., purifying materials for acetylene and other gases, (P.), B., 85.

Chemische Fabrik Griesheim-Elektron, Laska, L., and Weter, F., preparation of polyazo-dyes, (P.), B., 312. yellow monoazo-dyestuffs, (P.), B., 658. triazolo-dyestuffs, (P.), B., 650*. Chemische Fabrik Griesheim-Elektron, Laska, L., and Zitscher, A., azo-dyestuffs, (P.), B., 626*. black disazo-cotton dyes, (P.), B., 816.

Chemische Fabrik Griesheim-Elektron, and Löchner, L., bleaching wool, (P.), B., 11.

Chemische Fabrik Griesheim-Elektron, Löchner, L., and Köhler, G., bleaching bristles, (P.), B., 11.

Chemische Fabrik Griesheim-Elektron, and Merkel, F., process for rapid tanning, (P.), B., 168. quick tanning by means of the one-bath method, (P.), B., 610*.

Chemische Fabrik Griesheim-Elektron, and Pistor, G., drying calcium hypochlorite compounds, (P.), B., 410*.

Chemische Fabrik Griesheim-Elektron, Pistor, G., and Borsbach, E., production of phosphorus products, (P.), B., 631*.

Chemische Fabrik Griesheim-Elektron, Pistor, G., Schultz, H. S., and Reitz, H., producing calcium hypochlorite compounds, (P.), B., 488*.

Chemische Fabrik Griesheim-Elektron, and Reyher, R., basic dyestuffs of the malachite-green series, (P.), B., 626*.

Chemische Fabrik Griesheim-Elektron, Sander, F., and Kayser, E., intimately mixing liquids in mixers of the circulating pump or turbine type, (P.), B., 177.

Chemische Fabrik Griesheim-Elektron, and Schäfer, B., improving the fastness to light of insoluble dyes produced on the fibre from arylides of 2,3-hydroxy-naphthoic acid which contain a hydroxyalkyl group in the molecule, (P.), B., 318.

Chemische Fabrik Griesheim-Elektron, Schwalbe, C. G., and Wenzl, H., rapid bleaching process for loose or work-up vegetable fibres, (P.), B., 663.

Chemische Fabrik Griesheim-Elektron, Siecler, P., and Küster, K. H., production of low-boiling tar by the carbonisation of lignite, (P.), B., 308.

Chemische Fabrik Griesheim-Elektron, and Specketer, H., producing artificial cryolite, free from iron, (P.), B., 89.

Chemische Fabrik Griesheim-Elektron, Specketer, H., Sauer, F., and Kayser, E., recovery of volatile compounds from reaction mixture, (P.), B., 171.

Chemische Fabrik Griesheim-Elektron, and Suchy, R., manufacture of phosphoric acid, (P.), B., 320, 745*.

Chemische Fabrik Griesheim-Elektron, and Wenzl, H., treating fibrous vegetable materials for the production of cellulose, (P.), B., 871.

Chemische Fabrik Griesheim-Elektron, and Zitscher, A., azo-dyestuffs, (P.), B., 626*.

Chemische Fabrik Griesheim-Elektron, Zitscher, A., and Schmitt, R., diacyl-acetyl-diamino-compounds of the aromatic series, (P.), B., 435*.

Chemische Fabrik Grünau, Landshoff & Meyer, preparation of pure *blanc fixe* and sodium thiosulphate, (P.), B., 333. producing amino[hydroxy]compounds of the aromatic series by electrolysis, (P.), B., 736.

Chemische Fabrik Güstrow, Hillringhaus & Heilmann, manufacture of condensation products from phenols or their derivatives and acetaldehyde, (P.), B., 596.

Chemische Fabrik Haltingen, Jucker & Co. See Geigy, J. R., Soc. Anon.

Chemische Fabrik Heppes & Co., and Carpow, J. B., preparation of combustible and heating materials from peat and the like, (P.), B., 228. manufacture of phospholite fertilisers, (P.), B., 836.

manufacture of nitrogenous fertilisers from calcium cyanamide, (P.), B., 379.

Chemische Fabrik von Heyden A.-G., preparation of salts of *N*-halogen-substituted arylsulphonamides, (P.), B., 512. manufacture of aromatic stibinic acids, (P.), B., 514.

Chemische Fabrik von Heyden A.-G., and Lammering, D., preparation of fungicidal adsorption compounds, (P.), B., 960.

Chemische Fabrik von Heyden A.-G., and Schmidt, Hans, preparation of triacetamido-triphenylstibine, (P.), B., 901.

Chemische Fabrik Johannisthal, and Scheller, utilisation of exhausted primary batteries, (P.), B., 794.

Chemische Fabrik Kalk, hydrogen-nitrogen mixture for ammonia synthesis, (P.), B., 236.

Chemische Fabrik Kalk, and Oehme, H., vulcanisation of caoutchouc, (P.), B., 101*. preparation of ethylene glycol from ethylene oxide, (P.), B., 108.

Chemische Fabrik Kalk, Oehme, H., and Herrmuth, E., electrolytic preparation of alkaline-earth metals, (P.), B., 245.

Chemische Fabrik Kunthelm & Co., preparation of sodium sulphide or similar inorganic fusible chemicals in the form of small lumps, (P.), B., 439.

Chemische Fabrik Kunthelm & Co., and Puls, K., manufacture of chromium compounds free from iron, (P.), B., 127.

Chemische Fabrik Milch A.-G., and Lindner, K., bleaching vegetable fibres, (P.), B., 872. mercerising process, (P.), B., 873.

Chemische Fabrik Niederrhein Gesellschaft, and Ullmann, K., treatment of liquids with gases, (P.), B., 2.

Chemische Fabrik Norgine, Stein, V., and Wiechowski, W., production of alkaloid preparations from drugs, especially from ergot, (P.), B., 901.

Chemische Fabrik Pott & Co., and Pospisloch, F., wetting-out means [product] for carbonisation, dyeing, etc., in which textile materials containing animal fibres are treated with a mineral acid, (P.), B., 403.

Chemische Fabrik Pyrgos. See Haller, R.

Chemische Fabrik Rohner A.-G. Pratteln, [manufacture of a] monoazo-dyestuff, (P.), B., 149. preparation of the anilide of 2-naphthol-3-carboxylic acid, (P.), B., 185. azo-dyes, (P.), B., 234.

manufacture of 2-hydroxynaphthalene-3-carboxylic acid *m*-nitroanilide, (P.), B., 817.

Chemische Fabrik vorm. Sandoz, rendering mercerised cotton, ammonium cuproxide [cuprammonium] silk, viscose silk, and like products refractory against the further absorptions of direct dyes, (P.), B., 270.

Chemische Fabrik Schleich G.m.b.H., and Rosenheim, A., preparation of insoluble silver alkali thiosulphates, (P.), B., 321.

Chemische Fabrik A. Schmitz, increasing the fastness to rubbing of dyed materials, (P.), B., 154.

Chemische Fabrik zu Schöningen. See Vetterlein, R.

Chemische Fabrik H. Stolzenberg, production of hydrocyanic acid for use as an insecticide, (P.), B., 379. destruction of vermin, (P.), B., 614.

process for the manufacture of tartrates, (P.), B., 995.

Chemische Fabrik vorm. Weller-ter Meer, production of β -phenyl- β -hydroxy-propionic- α -carboxylic anhydrides, (P.), B., 8.

Chemische Fabrik vorm. Weller-ter Meer, and Suida, H., preparation of ethyl chloride, (P.), B., 463.

Chemische Fabrik Wurmas A.-G., preparation of tanning agents, (P.), B., 168.

Chemische Pharm. A.-G. Bad Homburg, preparation of quinine solutions suitable for subcutaneous injection, (P.), B., 853.

Chemische Werke vorm. Auergea. See Sommer, F.

Chemische Werke Hercules G.m.b.H., and Scholz, V., production of washing and bleaching agents, (P.), B., 888.

Chemische Werke Lothringen G.m.b.H., absorption apparatus for gases and vapours, (P.), B., 79.

Chemisches Laboratorium für Tonindustrie & Tonindustrie-Zeitung II. Seger & E. Cramer and Platzsch, M., preparation of clay, (P.), B., 129.

Chemosan A.-G., preparation of solutions of mercurated hydroxybenzenesulphonic acids and their homologues, (P.), B., 299.

Chen, H., laboratory latex, A., 815.

Chenault, R. L. See Foot, P. D., Mohler, F. L., and Ruark, A. E.

Chéneauau, G. See Féry, C.

Chenot, W. E., distillation [of hydrocarbon oils], (P.), B., 623.

Chermette, E. F. See Altweig, J.

Cherry, L. B., and C. C. Developing Co., treating hydrocarbons and oils, (P.), B., 700.

Chestnut, V. K. See Power, P. B.

Chestny, H. H. See Weatherby, L. S.

Chestnut and Smith Corporation. See Oberfell, G. G.

Chevalier, J. M. A., Bourcet, P., and Regnault, H., distillation of natural resins and oloresins, (P.), B., 602.

Chevalier, H., measurement of magnetisation of ferromagnetic powders, A., 783.

Chevenard, P., apparatus for demonstrating thermal transformations of steels and anomalies in special alloys, A., 42.

thermal anomalies of certain solid solutions, A., 1001.

differential dilatometer with mechanical registration [for metals], B., 365.

dilatometric anomaly of paramagnetic nickel-chromium alloys; alloy for dilatation pyrometry, B., 516.

resistivity and thermoelectric power of reversible iron-nickel alloys from -200° to $+1000^{\circ}$, B., 583.

Chevenard, P., and Portevin, A., elastic properties of alloys; variation with composition, B., 59.

Chevenard, P. See also Portevin, A.

Cheyrol, J. See Hérissey, H.

Chiappero, A., determination of calcium sulphate in golden antimony sulphide, B., 874.

Chibnall, A. C., leaf cytoplasmic proteins, A., 543.

Chibnall, A. C., and Grover, C. E., leaf-cell cytoplasm. I. Soluble proteins, A., 441.

Chicago Crucible Co., process of treating metals and composition therefor, (P.), B., 635*.

Chicago Crucible Co. See also Crosser, D. H.

Chicago Trust Co. See Ditto, M. W., and Roberts, A.

Chick, H., sources of error in the technique employed for the biological assay of fat-soluble vitamins, A., 436.

Chick, H., and Rosec, M. H., antirachitic value of fresh spinach, A., 437.

Chick, H. See also Smith, H. H.

Chiesa, L., determination of the proteolytic power of bathing materials, B., 715.

Chiesa, L. See also Baggini, G.

Chikashige, M., Kuriyama, I., Miyoshi, T., Teischb, C., Nogé, J., Takeuchi, K., and Kao, S., relation between colour and structure of alloys. II, A., 890.

Child, C. D., doubly ionised atoms in mercury vapour, A., 1074.

Child, R., and Smiles, S., synthesis of naphthalothioxins, A., 734.

phototropic aminoaryl disulphides, A., 1243.

Child, T. B., Roberts, E., and Turner, E. E., aluminioxalates of some optically active bases, A., 147.

Chipman, J., Soret effect, A., 1206.

Chirnaga, E., catalytic decomposition of sodium hypochlorite solutions by finely-divided metallic oxides, A., 916.

Chirvinski, P., simple stoichiometric ratio of the average blotite of granite and the relation between the anorthite and blotite contents of granite, A., 594.

Chisholm, S. L. See Wilson, R. E.

Chistoni, A., osmotic pressure of aqueous solutions of cerous chloride, A., 121.

Chlopin, N., and Balandin, A., adsorption of barium chloride by colloidal hydrated manganese dioxide in aqueous solutions, A., 119.

Chlopin, W., and Lukasuk, A., apparatus for the determination of helium in natural gas mixtures and minerals, B., 51.

Chlopin, W. See also Techugae, L.

Chlorine Products Co. See Jewell, W. M.

Chloupek, J. See Milbauer, J.

Chmura, T., obtaining by-products and heat from burning sulphur, pyrites, hydrogen sulphide, sulphurous acid, and other incompletely oxidised sulphur compounds, (P.), B., 742.

deoxygenating air by the combustion of sulphur or its incompletely oxidised compounds, (P.), B., 1014*.

Choay, A., nature of the internal secretion of the pancreas and mechanism of its action, A., 1179.

Choffel, C., and Jacqueline, A. P., [acetylene or oxygen] gas generators, (P.), B., 941*.

Chomé, P., and Defossez, L., coke oven with vertical heating flues, (P.), B., 350.

Chou, T. Q., preparation and properties of ephedrine and its salts, A., 1263.

Choucroun, (Mme.), radiochemistry of fluorescent substances, A., 685.

Choucroun, (Mme.) See also Perrin, J.

Choudary, R. S., and Yoganandam, E., fermentation of divi divi liquor. II. Acidity of divi divi liquor, B., 925.

South Indian tanning materials, B., 925.

Chree, C., atmospheric ozone and terrestrial magnetism, A., 494.

Christholm, S. L. See Wilson, R. E.

Chrisman, C. S. See Humphreys & Glasgow, Ltd.

Christ, W. See L. G. Farbenfabrik, A. G.

Christelow, J. W. See Martin, G.

Christensen, C. E. See Rasmussen, H. B.

Christensen, C. J. See Walton, J. H.

Christensen, J. H., producing water-insoluble multicoloured [photographic] screens, (P.), B., 110*.

producing photographic copies by means of phosphorescent substances, (P.), B., 110*.

Christensen, L. M. See Fulmer, E. I.

Christensen, L. O., protein-fat ratio in diabetic blood, A., 637.

Christensen, N. C., treating mixed lead-zinc sulphide ores, (P.), B., 330.

process for making anhydrous zinc chloride, (P.), B., 708.

Christensen, N. C. See also Elmore, F. E.

Christensen, N. H., manufacture of powdered milk, (P.), B., 383.

Christiansen, J. A., velocity of the reaction between hydrogen peroxide and iodine ions, A., 33.

mechanism of the reaction between iodine, iodine ions, and hydrogen peroxide, A., 33.

equilibrium between methyl formate and methyl alcohol, and some related equilibria, A., 358.

velocity of gas-reactions, A., 1213.

Christiansen, W. G., derivatives of *p*-carboxyphenoxycetic acid, A., 518.

reaction of some polyhydroxy phenols with sodium antimonyl tartrate, A., 722.

derivatives of gallic acid and pyrogallol, A., 725.

reaction of some polyhydroxy phenols with sodium antimonyl tartrate; [diantimonyl derivatives of di-2:3:4-trihydroxybenzylidene-3:3'-diamino-4:4'-dihydroxyarsenobenzene], A., 747.

Christie, A. W., and California Walnut Growers' Association, bleaching nuts, (P.), B., 106.

Christie, G. H., Holderness, A., and Kenner, J., molecular configurations of polynuclear aromatic compounds. VI. β -Dinitrophenic acid; its constitution and resolution into optically active components, A., 518.

Christie, G. H., and Kenner, J., molecular configurations of polynuclear aromatic compounds. V. Identity of the nitration products derived from 2:7- and 4:5-dinitrophenanthraquinones, A., 408.

Christie, G. H., and Menzies, R. C., applications of thallium compounds in organic chemistry. II. Titrations, A., 55.

Christison, H., Nutting, C. L., and Arlington Mills, removing free sulphur from [wool] grease, (P.), B., 136.

Christomanos, A. A., pharmacology of benzyl alcohols, A., 541.

Chrobak, L., dependence of vapour pressure of desminite on water content and temperature, A., 793.

Chromium Products Corporation. See Hosdowich, J. M., and Schwartz, K. W.

Chrysler, L. H. See Bosworth, A. W.

Chrzaszcz, T., Bidinski, Z., and Krause, A., influence of hydrogen-ion concentration on dextrin formation from starch by purified malt amylase, A., 93.

Chrzaszcz, T., and Goralszna, C., milk-diastase, A., 321.

Chu, C. T., soft X-rays from certain metals, A., 2, 1073.

Chubbuck, C. T., manufacturing hydrated lime, (P.), B., 584.

Chudožilov, L. K. See Vesely, V.

Chuit, P., polymethylenedicarboxylic acids containing 11-19 carbon atoms and their derivatives, A., 499.

Church, J. A., jun., and United Verdo Extension Mining Co., smelting furnace and method of smelting ores therein (P.), B., 17.

Churchman, A., fermentation of cacao shell, B., 210.

Chute, G. M. See Bain, J. W.

Chute, H. O., vulcanisation of rubber, (P.), B., 738.

Chwala, A., and Oderberger Chemische Werke A.-G., manufacturing colloidal compounds of arsenic, (P.), B., 406.

Cicali, G., [production of] hydrogen, (P.), B., 351.

apparatus for the synthesis of ammonia, (P.), B., 405, 979.

liquefaction and rectification of air or other gaseous mixture into its components, (P.), B., 406.

decomposition of mixtures and principle of physical substitution in the gaseous phase; [preparation of hydrogen from water-gas], B., 682.

Ciolfi, P. P. See McKeahan, L. W.

Citron, W. See Kritishevsky, W.

Cittert, P. H. van, measurement of the fine structure of hydrogen lines with the Lummer-Gehrcke plate, A., 445.

Ciusa, R., and Barattini, G., Doebner's reaktion, V., A., 736.

Claassen, W., production of new ester mixtures, (P.), B., 769.

Claassen, W. See also Garke, R., and Meyer, Eberhard.

Claassen, M., conversion of hard cheese into durable soft cheese, (P.), B., 297.

Claassen, A., scattering power of oxygen and iron for X-rays, A., 1072.

crystal structure of beryllium oxide, A., 1194.

Claassen, A. See also Bijvoet, J. M., and Smits, A.

Claassen, H., assimilation of nitrogen by yeast from culture media in the aeration process, A., 641.

beet molasses as raw material for the production of yeast by the aeration process, B., 686.

assimilability of the nitrogen in the nutrient solution by yeast in the aeration process, B., 718.

Claasz, M., manufacture of an artificial gypsum stone, (P.), B., 587.

Claessen, C., preparation of initiators [primers, caps, and detonators], (P.), B., 254.

Claesen, L., *o*-alkyl derivatives of benzoylacetone and the *iso*oxazoles derived therefrom, A., 406.

Claisen, L., and Tietze, E., migration of allyl in phenyl allyl ethers from oxygen to an unsaturated *o*-side-chain, A., 1034.

mechanism of the transformation of phenyl allyl ethers. II, A., 1241.

Clancy, J. C., manufacturing hydrocarbons and cyanides, (P.), B., 486.

Clancy, J. C. and Nitrogen Corporation, method of forming nitrogen-hydrogen mixtures, (P.), B., 822.

Clapp, E. J., and United States Industrial Alcohol Co., absolute alcohol process, (P.), B., 638.

Clare, N. P., supersaturation of gases in liquids, A., 18.

Clarens, J., study of the reaction of soils in regard to alkalis, B., 762.

Clark, A. H., alkaloids of *Ceanothus americanus*, A., 548.

assay of salicylates and benzoates, B., 767.

Clark, A. J., reaction between acetylcholine and muscle cells, A., 1057.

Clark, E., organic theories of oil origin, B., 731.

Clark, E. M., Howard, F. A., and Standard Development Co., fractionally distilling and condensing oils, (P.), B., 864.

Clark, E. M., and Standard Development Co., distilling petroleum oils, (P.), B., 183.

pyrogenesis of petroleum, (P.), B., 526.

distillation of crude petroleum, (P.), B., 574.

Clark, E. M. See also Howard, F. A.

Clark, E. P., and Collip, J. B., determination of carbamide in blood, A., 763.

Clark, E. P. See also Collip, J. B., and Raiford, L. C.

Clark, E. R., and Erlanger, M. S., cotton fabric having a linen-like finish resistant to wear and washing, (P.), B., 124.

extraction of cellulose, (P.), B., 661.

Clark, F. G., and Rees, W. J., sillimanite in glass furnace practice, B., 239.

Clark, F. G. See also Stuart, A. T.

Clark, F. W. See Travers, M. W.

Clark, G. L., Asbury, W. C., and Wick, R. M., examination of nickel catalysts with X-rays, A., 12.

Clark, G. L., Brugmann, E. W., and Aborn, R. H., new multiple X-ray spectrograph combining the powder diffraction and monochromatic pinhole methods, A., 706.

Clark, G. L., Brugmann, E. W., and Thee, W. C., effects of knock inducers and suppressors upon gaseous ionisation, B., 83.

Clark, G. L., and Fröhlich, P. K., electrolytic deposition of metals. II. X-Ray investigation of electrolytic nickel, B., 131.

Clark, G. L., and Thee, W. C., ultra-violet spectroscopy of flames of motor fuels, B., 522.

Clark, G. L., Weber, H. C., and Hershey, R. L., precision X-ray spectrometer for chemical investigations, A., 41.

Clark, G. L. See also Fröhlich, P. K.

Clark, G. W., acid and base-forming elements in foods, B., 74.

Clark, G. W., and De Lorimier, A. A., effects of caffeine and theobromine on the formation and excretion of uric acid, A., 974.

determinations of uric acid in human blood, A., 1283.

Clark, G. W., and Sharp, P. W., properties and composition of oocytin. II, A., 205.

Clark, J. d'A., esparto pulp by the Keebra process, B., 781.

Clark, J. H., irradiated proteins. I. Congulation of egg-albumin by ultra-violet light and heat, A., 1163.

Clark, L. E. See Ries, E. D.

Clark, L. F., treatment of lead minerals, (P.), B., 62.

Clark, L. H., secondary radiations produced by γ -rays and their effect on γ -ray absorption measurements, A., 1076.

Clark, L. H. G., and Cohen, (Miss) E., under-water spark spectra of the palladium-platinum group of metals, A., 766.

Clark, L. M., quaternary salts of benzoxazoles, A., 309.

Clark, L. M. See also Rooney, T. E.

Clark, L. P. See Dill, D. B.

Clark, R. G. See Canning, T. F.

Clark, R. H., and Crozier, R. N., replacement of halogens from aromatic compounds, A., 155.

two forms of *o*-nitrotoluene, A., 159.

Clark, R. H., Graham, W. E., and Winter, A. G., catalytic preparation of ethyl ether from ethyl alcohol by means of aluminium oxide, A., 45.

Clark, R. H., and Offord, H. R., tannin content of British Columbian *Alnus rubra*, B., 683.

alkaloidal content of British Columbian *Datura stramonium* and *Conium maculatum*, B., 689.

Clark, R. J., electrostatic moments of molecules, A., 1075.

Clark, W., electrometric titration of halides, A., 590.

fogging action of hydrogen peroxide, B., 253.

small mercury-vapour lamp for laboratory use, B., 445.

Clark, W. G., electrofining glass furnace, (P.), B., 789*.

Clark, W. M., Cohen, B., and Gibbs, H. D., oxidation-reduction. IX. Potentiometric and spectrophotometric study of meriquinones of the *p*-phenylene diamine and benzidine series, A., 1008.

Clark, W. M. See also Cannan, R. K.

Clarke, B. L., viscosity of soap solutions, A., 122.

Clarke, B. W. See Hinchliffe, J. W.

Clarke, F. G. See Allan, W. G.

Clarke, H. T., and Eastman Kodak Co., preparing pentaerythritol tetra-acetate, (P.), B., 645.

Clarke, H. T., and Rahrs, E. J., "bubbler" laboratory fractionating column, A., 1223.

Clarke, I. D., determination of moisture in tannery materials, B., 839.

Clarke, J. B. See Bennison, F.

Clarke, N. S., and Athabasca Oil Products, Ltd., separation of oil from oil sands, (P.), B., 733.

Clarke, R. W. See Schneider, E. C.

Clarke, S. G. See Evans, B. S.

Clarke, S. W., and Brown, J. R., resists for use in dyeing and printing, (P.), B., 357.

Clarkson, W., flashing of certain types of argon-nitrogen discharge tubes, A., 107.

Clasen, A., and Commercial Alcohol Co., Ltd., manufacture of cellulose solutions, (P.), B., 188*.

Claude, G., ammonia synthesis from coke-oven gas, B., 404.

Claude, G., and Lazote, Inc., manufacture of hydrogen by partial liquefaction of gaseous mixtures, (P.), B., 407*.

synthesis of ammonia, (P.), B., 488*.

purification of gases for ammonia synthesis, (P.), B., 707.

Claudius, M., micro-determination of chloride in blood and other media containing proteins, A., 211.

Claus, R. See Prescher, J.

Claus, W., segregation phenomena in copper-zinc alloys, B., 750.

Clause, F. H., separation of larger from smaller grains of granular substances, (P.), B., 305*.

Clauer, F., lipolytic enzymes in the blood of pregnant women, A., 94.

Clavel, R., dyeing cellulose acetates, (P.), B., 235*.

Clavera, J. M., adsorption of arsenous oxide by ferric hydroxide gels and ferric magnesium hydroxide gels, A., 672.

Clay, R., Ltd., Scott, H. M., and Thompson, L., production of pattern and similar effects on fabrics containing cellulose, (P.), B., 663.

Clayton, R. F. See White, H. T.

Cleminson, J., and Briscoe, H. V. A., catalytic dissociation of carbon monoxide, A., 1012.

Clemm, H., Schneider, A., and Zellstoff-fab. Waldhof, utilising waste heat from gas [from sulphur burners, etc.], (P.), B., 538.

Clemo, H. R., and Perkin, W. H., *Jun.*, synthesis of 4-keto-1 : 2 : 3 : 4-tetrahydroquinolines and attempted synthesis of 4-keto-1 : 2 : 3 : 4-tetrahydroisoquinoline, A., 76.

Clerk, D., explosive reactions considered in reference to internal-combustion engines, B., 617.

Clermontel, A. J., dressing skins, (P.), B., 683*.

Clevenger, G. H., and Research Corporation, apparatus for treating ores, (P.), B., 63.

Cleworth & Co., Ltd., A. B., and Cleworth, A. B., air or gas filters, (P.), B., 650*.

Cleworth, A. B. See Cleworth & Co., Ltd., A. B.

Clibbens, D. A., and Geake, A., chemical analysis of cotton. XI. Absorption of methylene blue from buffered solutions, B., 628.

Clibbens, D. A. See also Birtwell, (Mits) C.

Clifford, W. M., effect of short periods of cold storage on beef and mutton, B., 252.

Clinch, (Mits) P. See Doyle, J.

Cline, M. G., apparatus for extracting volatile oils from solid substances, (P.), B., 693.

apparatus for extracting rosin and turpentine from wood, (P.), B., 714.

Cloetta, M., preparation and chemical composition of the active substances of *Digitalis* leaves, their pharmacological and therapeutic properties, A., 755.

Cloetta, M., and Brauchi, E., effect of morphine on the concentration of ions in the blood plasma, A., 431.

Clotofski, F. See Rulke, K.

Clough, G. W., relationship between optical rotatory powers and relative configurations of optically active compounds. II. Relative configurations of optically active mandelic acids and β -phenyl-lactic acids, A., 111.

relationship between the optical rotatory powers and the relative configurations of optically active compounds. III, A., 937.

Clouwer, C., apparatus for washing and classifying minerals, (P.), B., 808*.

Clover, A. M. See Park, Davis & Co.

Clusing, K. See Schumann, R.

Clutterbuck, P. W., and Raper, H. S., fate in the animal body of phenylsuccinic acid and β -phenylhexoic acid, A., 199.

oxidation of acetonecarboxylic acid and ester by hydrogen peroxide and its biochemical significance, A., 427.

Chaduc, M. See Berthelot, A.

Coal Carbonisation Co. See Hayes, C.

Coast, J. W., *Jun.*, and Doherty Research Co., continuously distilling and cracking hydrocarbon oils, (P.), B., 622.

Coats, H. P., device for arc-welding easily oxidisable wires, A., 931.

Cobb, J. W., and Hodman, H. J., purification of gas, (P.), B., 232*.

Cobb, J. W. See also Marson, C. B.

Cobb, (Mits) R. M., effects of age on soap solutions, A., 23*.

Cobb, (Mits) R. M., and Hunt, F. S., dispersion of powdered egg yolk, B., 206.

chrome tanning at the isoelectric point of collagen, B., 925.

Cobenzl, A., dyes from nitrosodialkylanilines, safranine, and Meldola blue, B., 656.

Coblenz, W. W., and Finn, A. N., non-actinic cobalt-blue glass, B., 667.

Cochran, P. B. See Spence, L. V.

Cochran, R. S. See Marsh, H. S.

Cochrane, W. F., and United States Industrial Alcohol Co., nickel-chromium alloy, (P.), B., 63.

Cochrane Corporation, and Gibson, G. H., heating and de-aerating boiler feed and other water, (P.), B., 854*.

Cochrane Corporation. See also McNeill, R. S.

Cocking, T. C., and Price, E. A., colour reactions of vitamin-A, B., 800.

Cocks, H. C. See Allmand, A. J.

Cocksedge, H. E., and Solvay Process Co., process of forming sodium compounds, (P.), B., 488*.

sodium compound, (P.), B., 488*.

Cocoa Products Co. of America. See Gephart, F. C.

Coe, D. G., effects of various methods of applying fertilisers on crops and on certain soil conditions, B., 379*.

Coe, H. S., and Cyclo Co., filter; filtering apparatus, (P.), B., 256*.

filtering process, (P.), B., 345.

Coe, J. R., and American Brass Co., electric melting furnace, (P.), B., 886.

Cohn, A., and Helmer, G., mechanism of photochemical processes. V. Surface catalysis in the photochemical production of hydrogen chlorite, A., 1112.

Cohlo, E. See Pinus, L.

Coffey, B. H., refrigeration, (P.), B., 144.

Coffey, S., mercuration of aromatic compounds and its bearing on substitution in the benzene nucleus, A., 629.

mercuration of aromatic substances. II. o-Nitrotoluene, A., 629.

Coffignier, C., lead resins, B., 553.

Coffin, J. G., Keen, A. W., and Naugatuck Chemical Co., treating pulverulent material [clay], (P.), B., 249.

Cofman, Y., "gas laws" in surface solutions, A., 674.

Coghill, R. D., chemistry of bacteria. XII. Albumin-globulin fraction of tubercle bacillus. XIII. Alkali-soluble protein of tubercle bacillus, A., 1277.

Coghill, R. D. See also Johnson, T. B.

Cohen, B. See Cannan, R. K., Clark, W. M., and Gibbs, H. D.

Cohen, E., and Dobbenburgh, W. D. J. ran, influence of very slight traces of water on solubility equilibrium, I., A., 18, 244*.

Cohen, E., and Miyake, S., influence of very slight traces of water on solubility equilibria, II., A., 466.

Cohen, E., Verkade, P. E., Miyake, S., Coops, J., *Jun.*, and Hoeve, J. A. ran der, salicylic acid as a standard in calorimetry, A., 1103.

Cohen, (Mits) E. See Clark, L. H. G.

Cohen, J., concentration of diastase in the urine throughout the day, A., 636.

Cohen, J. B. See Browning, C. H., and Dawson, E. R.

Cohen, J. S., Leerburger, A. B., and Interstate Chemical Co., insecticide, (P.), B., 1030.

Cohen, L., Meulen-Heslinga halogen determination, A., 590.

Cohen, W. D., higher fatty acids of peanut [arachis] oil, B., 98.

Cohn, E., and Wagner, A., micro-determination of dextrose by Bang's method, A., 211.

Cohn, E. See also Freudenberg, K.

Cohn, E. J., and Conant, J. B., molecular weights of proteins in phenol, A., 891, 1080*.

Cohn, H. See Freudlich, H.

Cohn, M. M., effect of chlorination on trickling sewage filters, B., 693.

Coke & Gas Ovens, Ltd., and Pearson, R., neutralising the free acid in commercial ammonium sulphate, (P.), B., 1014.

Colani, A., system uranyl nitrate-nitric acid-water, A., 1114.

Colas-Belcourt, J., and Lvov, A., utilisation of sugars by protozoa, A., 1178.

Colbert, J. C. See Raiford, L. C.

Colclough, T. P., reactions of basic open-hearth [steel] furnace, B., 367*.

Colcord, F. F., [silver-gold] parting plant at the U.S.S. Lead Refinery, Inc., B., 494.

Colcord, F. F., Kern, E. F., and Mulligan, J. J., conductivity of electrolytes used in the electrolytic separation of silver and gold, B., 494.

Cole, A. F. W. See Martin, W. H.

Cole, G. H., and Westinghouse Electric and Manufacturing Co., annealing furnace, (P.), B., 224.

annealing sheet steel, (P.), B., 244.

Cole, H. I. See Chamot, E. M.

Cole, K., blackening of photographic emulsions by low-speed electrons, A., 1189.

Cole, S. S., properties of silica brick from coke-oven walls, B., 489.

requirements of refractories for manufactured gas plants, B., 916.

Cole-French Co. See Pike, R. D.

Coleman, C. E. See Hall, R. E.

Collens, A. Z., lime seed oil and oil cake, B., 987.

Collens, W. S., Shelling, D. H., and Byron, C. S., physiology of the liver. I. Effect of legation of the hepatic artery on carbohydrate metabolism, A., 1272.

Colin, H., irreversible hydrolysis of maltose by maltase, A., 1229.

Colin, H., and Chaudun, (Mits) A., variation of the hydrolysis constant of sucrose with the concentration, A., 580.

Colin, H., and De Cugnac, A., levulosans of the *Gramineae*; graminin and tricitin, A., 1086.

Colin, H., and Grandsire, A., chemical characteristics of green, yellow, and red leaves, A., 209.

Colin-Russ, A., determination of fat and water-soluble [matter] in leather, B., 70.

Collander, R., permeability of collodion membranes, A., 791.

Collar, (Mits) W. M., and Plant, S. G. P., derivatives of tetrahydrocarbazole. V. Carboxylic acids, A., 735.

Collard, C., evaporation and concentration of [salt] solutions, (P.), B., 438.

Collard, C. H. F. See Crosbie, S.

Collazo, J. See Binet.

Collazo, J., and Supniewski, J. V., lactic acid in blood, A., 315.

Collenberg, O., and Sandved, K., electrometric determination of iron with bromate, A., 140.

Collet, P., constant paramagnetism of solutions, A., 234.

Collett, A. R., and Johnston, J., solubility relations of isomeric organic compounds. VI. Solubility of the nitroanilines in various liquids, A., 237.

Collett, R. L., action of lime on enzymes, B., 464.

Collier, D. C., recovering oil from oil-bearing sands, (P.), B., 524.

Collier & Co., and Schaefer, J., charging coke ovens, (P.), B., 261.

charging of coal into coke-ovens, (P.), B., 264.

Collings, W. R., and Dow Chemical Co., flake magnesium chloride and method of making it, (P.), B., 822.

Collins, A. M. See Jacobs, W. A.

Collins, H., structure of manganese, A., 7.

structure of tin, A., 106.

structure of lead, A., 221.

structure of iodine, A., 333.

law of heat of formation, A., 508.

fundamental constants of nature, A., 993.

structure of aluminium, A., 1191.

Collins, J. R., change in the infra-red absorption spectrum of water with temperature, A., 108.

Collins, N. L., production of silicic acid, (P.), B., 88.

Collins, S. H., and Gill, R., variations in individual sugars in the Jerusalem artichoke during growth, B., 338.

Collin, J. B., parathyroid hormone and its physiological action, A., 546.

production of phenomena peculiar to parathyroid overdosage in dogs by means of certain inorganic salts, A., 640.

Collip, J. B., and Clark, E. P., parathyroid hormone. II, A., 206.

relation of guanidine to parathyroid tetany, A., 637.

preparation, physiological properties, and standardisation of a parathyroid hormone, A., 1180.

Collip, J. B. See also Clark, E. P.

Collis, N. P., and Collis Co., desiccating apparatus [for milk and buttermilk], (P.), B., 419.

Collis Co. See Collis, N. P.

Collison, R. C., and Conn, H. J., effect of straw on plant growth, B., 416.

Collois Colour Co., Ltd. See Eberlein, W., and Goedecke, C. E. J.

Columbier, L., determination of allyl mustard oil [allyl thiocarbimide] in mustard flour, B., 506.

Colvin, J., ionic activity product of water in glycerol-water mixtures, A., 245.

decomposition of nitrosotriacetoneamine in presence of hydroxyl ion. I. Region of small concentrations of alkali, A., 1109.

Comber, N. M., anomalous flocculation of clay, A., 1064.

Combes, R., autumnal migration of nitrogenous substances in the beech during the autumnal fading of the leaves, A., 761.

Combes, R., and Echevin, R., variation of organic and mineral constituents, especially calcium, in leaves of trees during autumnal fading, A., 872.

Combustion Control Co. See Potter, F. D.

Combustion Engineering Corporation. See Kreisinger, H.

Combustion Utilities Corporation. See Wintsch, V., *Jun.*

Comey, R. H. See Wintsch, V., *Jun.*

Comey Brodydun Co., R. H. See Geisler, E. W.

Commercial Alcohol Co., Ltd. See Classen, A.

Commercial Solvents Corporation. See Bogin, C., Bolnot, F., Brown, B. K., Hancock, C. W., Legg, D. A., Littmann, E. R., and Pigg, C. E.

Compagnie de l'Azote et des Fertilisants S.A., fertiliser containing urea, (P.), B., 417.

Compagnie de l'Azote et des Fertilisants S.A. See also Breslauer, J.

Compagnie du Boles. See Morse, H. W.

Compagnie pour la Fabr. des Compteurs et Matérial d'Usines à Gaz, debenzolisation of gas, (P.), B., 524.

Compagnie Francaise pour l'Exploit. des Proc. Thomson-Houston. See British Thomson-Houston Co., Ltd.

Compagnie Générale des Industries Textiles. See Duhamel, E. C.

Compagnie des Lampes, cord-free glass, (P.), B., 276.

Compagnie Lorraine des Charbons, Lampes d'Appareillages Élect., carbon electrodes for primary cells using air-depolarisation, (P.), B., 284.

Compagnie des Métaux Overpelt-Lommel. See Fassotte, A. D. H. L.

Compagnie des Mines de Vicoigne, Nœux & Drocourt, partial conversion of coal into light hydrocarbons, (P.), B., 182.

Compagnie Nationale de Matières Colorantes et Manuf. de Prod. Chim. du Nord Réunis, Établ. Kuhlmann, dyeing brown shades on [cotton] fibres, (P.), B., 536.

reduction of vat dyes to leuco-compounds, (P.), B., 868.

manufacture of glue or gelatin in the form of discs or tablets, (P.), B., 990.

Compagnie Nationale de Matières Colorantes et Manuf. de Prod. Chim. du Nord Réunis, Établ. Kuhlmann, and Pereira, H., vat dyes of the perylene series, (P.), B., 265.

Compagnie Nationale de Matières Colorantes et Manuf. de Prod. Chim. du Nord Réunis, Établ. Kuhlmann. See also Pereira, H.

Complex Ores Recoveries Co. See Coolbaugh, M. F., and Read, J. B.

Compton, A. H., and Simon, A. W., measurements of the β -rays excited by hard X-rays, A., 1076.

Compton, A. H., and Westinghouse Lamp Co., glass, (P.), B., 192*.

Compton, J. N., and Carbide and Carbon Chemicals Corporation, process of combining ethylene with sulphuric acid, (P.), B., 931.

Compton, K. T., interpretation of deviations from Ohm's law, A., 1080.

Compton, K. T., and Duffendack, O. S., dissociation of hydrogen and nitrogen by mercury atoms excited in an arc, A., 3.

Compton, K. T., and Thomas, C. H., soft X-rays; improvements in technique and new results for carbon, copper, and tungsten, A., 1180.

Compton, K. T., and Van Voorhis, C. C., probability of ionisation of gas molecules by electron impacts, II., A., 769.

probabilities of ionisation by electron impacts in hydrogen and argon, A., 1074.

Compton, K. T. See also Eckart, C., and Turner, L. A.

Comstock, D. F. See Wall, E. J.

Comstock, G. F., treatment of steel with ferro-carbon-titanium, B., 826.

Comucel, P., wulfenite and vanadinite from Ouidia (Morocco), A., 595.

Comyn, B. D., and White, W. A., separation of liquids of different specific gravities, (P.), B., 426*.

Conant, J. B., electrochemical formulation of the irreversible reduction and oxidation of organic compounds, A., 807.

Conant, J. B., and Cutler, H. B., irreversible reduction of organic compounds. II. Bimolecular reduction of carbonyl compounds by vanadous and chromous salts, A., 618.

Conant, J. B., and Pratt, M. F., irreversible reduction of organic compounds. III. Reduction of azo-dyes, A., 1134.

Conant, J. B., and Scott, N. D., adsorption of nitrogen by haemoglobin, A., 750.

so-called oxygen content of methaemoglobin, A., 1050.

Conant, J. B., and Small, L. F., dissociation into free radicals of substituted dianthryls. II. Dissociating influence of the cyclohexyl group, A., 158.

Conant, J. B., Small, L. F., and Sloan, A. W., dissociation into free radicals of substituted dianthryls. III. Effectiveness of secondary alkyl groups in promoting dissociation, A., 842.

Conant, J. B. See also Cohn, E. J.

Conder, H., recovering iron and sulphur from sulphide ores, (P.), B., 196.

Condon, E. See Loeb, Leonard.

Condorelli, L., micro-determination of calcium and magnesium in organic liquids, A., 39.

Condorelli, P., constituents of the tegument of the seeds of *Anagyrus fetida*, A., 210.

Cone, A. I., safety paper, (P.), B., 661.

Coniglio, L. See Zambonini, F.

Conn, H. J. See Collison, R. C.

Conn, J. F., and Lowy, A., electrolytic oxidation of *p*-bromotoluene and *o*-nitrotoluene, A., 1111.

Conrad, M. E., and Schoenmehl, C. B., Inc., voltaic cell, (P.), B., 284.

Conrad, R., absorption by scattering of hydrogen positive rays by passage through hydrogen and helium, A., 106.

absorption by scattering of hydrogen positive rays by passage through hydrogen, A., 990.

Conrath, P. See Reinitzer, B.

Conroy, J. T., use of chlorine in the organic chemical industry, B., 432*.

Consigny, J., influence of metallic screens on the form of the ionisation curve of α -rays, A., 772.

stopping-power of some metals for α -particles, A., 879.

Consortium für Elektrochemische Industrie G.m.b.H., Baum, E., and Herrmann, W. O., improving the quality of resins, (P.), B., 597.

polymerising vinyl esters, (P.), B., 680.

Consortium für Elektrochemische Industrie G.m.b.H., Meingast, R., and Mugdan, M., manufacturing acetic anhydride, (P.), B., 386*.

Consortium für Elektrochemische Industrie G.m.b.H. See also Herrmann, W. O.

Constable, F. H., dynamics of surface action in closed vessels, A., 250.

immobile groups of atoms with strong specific external fields as the cause of catalytic activity, A., 250.

behaviour of centres of activity of saturated surfaces during the initial stages of unimolecular reactions, A., 582.

structure of catalytically active copper, A., 1195.

stability of copper catalysts produced by thermal decomposition, A., 1216.

Constant, G., and Bruza, A., reduction of ores with continuous regeneration and transformation of the residual gas produced during reduction into fresh reducing gas, (P.), B., 711*.

Consten, F. See Jiroka, B.

Contardi, A., and Cazzani, U., De Myttenaere index for the chemical determination of the toxicity of arsenobenzenes, B., 994.

Conti, E. See Fontane, C. A.

Continental Can Co. See Morgan, T. W.

Continentale A.-G. für Chemie, preparation of highly viscous lubricating oils, (P.), B., 414.

Continentale A.-G. für Chemie, and Tern, R., separating and obtaining the constituents of waste oils and fats, (P.), B., 1020.

Continentale A.-G. für Chemie & Reichsverkehrsbanke, apparatus for the distillation of oils and fats, (P.), B., 594.

Contzen-Crowet, C., preparation by azeotropy of mono-esters of saturated, acyclic, dibasic acids, A., 938.

Conzelmann, W. See Wartenberg, H. von.

Cook, (Miss) A. M. R. See Read, J.

Cook, E. F. II., bleaching of wool with sulphur dioxide; summary of the literature, B., 871*.

Cook, G. A., Love, E. F. S., Vickery, J. R., and Young, W. J., refrigeration of meat, I. Beef, B., 604.

Cook, J. W., reactivity of *meso*-substituted anthracenes, I., II., and III., A., 838, 953, 1131.

Cook, J. W. See also Barnett, E. de R.

Cook, N. E. See Peacock, S.

Cook, R. S. See Pease, R. N.

Cook, S. F., effects of certain heavy metals on respiration, A., 540.

latent period in the action of copper on respiration, A., 760.

toxic action of copper on *Nitella*, A., 1058.

Cook, T. R., [gas] purification, B., 35.

Cook, W. C., effectiveness of certain paraffin derivatives in attracting flies, B., 518.

Cook, W. R. See Lennard-Jones, J. E.

Cook, W. T., and Jones, W. R. D., copper-magnesium alloys, B., 830.

Cooke, E. P., and American Beccari Corporation, transforming organic matter [to render the nitrogen available for fertilising], (P.), B., 991.

Cooke, J. H. See Smith, H. L.

Cooke, T. G. See Phipps, J. E.

Cooke, W. T. See Radium and Rare Earths Treatment Co.

Coolbaugh, M. F., Read, J. B., and Complex Ores Recoveries Co., treating manganese-silver ores, (P.), B., 97.

treating arsenic and antimony compounds and minerals, (P.), B., 921.

Coolbaugh, M. F. See also Read, J. B.

Cooley, J. P., infra-red absorption bands of methane, A., 659.

Coolhaas, C. See Söhngen, N. L.

Coolidge, A. S., interpretation of adsorption isotherms and isosteres, A., 1002.

Coolidge, J. R., impregnated woods and processes of treating woods, (P.), B., 709*.

Coolidge, T. See Redfield, A. C.

Coolidge, W. D., high-voltage cathode rays outside the generating tube, A., 989.

Coombs, E. See Grindle, F.

Coombs, F. A., McGlynn, W., and Welch, M. B., tannins of the black cypress pine (*Callitris calcarata*) and their distribution in the bark, B., 838.

Coombs, H. I., and Hele, T. S., sulphur metabolism of the dog. IV. Mechanism of mercapturic acid formation in the dog, A., 862.

Coombs, H. I., and Stephenson, M., gravimetric determination of bacteria and yeast, A., 1284.

Cooms, C. C. See Parry, S. W.

Coons, G. H., and Klotz, L. J., nitrogen constituents of celery plants in health and disease, A., 210.

Cooper, C., Henshaw, D. M., and Holmes & Co., Ltd., W. C. [prevention of corrosion in the] manufacture of fuel gases, (P.), B., 428.

Cooper, C. J. A., Haworth, W. N., and Peat, S., constitution of the disaccharides, X. Maltose, A., 602.

Cooper, E. A., and Edgar, S. H., biological significance of *cis-trans*-isomerism, A., 1172.

Cooper, E. A., and Forstner, G. E., bactericidal action of nitroso-compounds, B., 518.

Cooper, E. A., and Robinson, (Miss) L. I., bactericidal action of cadmium compounds, B., 934.

Cooper, E. A. See also Morgan, G. T.

Cooper, F. B., contributing cause of turbidity of sterilised solutions in the determination of urea in the whole blood, A., 1067.

Cooper, H. S., Bensing, L. P., and Kemet Laboratories Co., production of zirconium oxide, (P.), B., 539.

Cooper, H. S., and Kemet Laboratories Co., tin-zirconium alloy, (P.), B., 133.

Cooper, H. S. See also Beryllium Corporation of America.

Cooper, J. D., jun. See Rhodes, F. H.

Cooper, K. E., Ingold, C. K., and Ingold, (Mrs.) E. H., correlation of additive reactions with tautomeric change. V. Structural conditions affecting mobility and equilibrium in additive reactions, A., 938.

Cooper, K. E., and Ingold, (Mrs.) E. H., reversibility of triazan formation, A., 1023.

Cooper, K. F., and American Cyanamid Co., production of cyanide solutions [from crude cyanide], (P.), B., 64.

Cyanide product, (P.), B., 980.

Cooper, W. C. See Baxter, G. P.

Coops, J., jun., and Verkade, P. E., calorimetric researches. IX. Heat of combustion of *d*- and *meso*-tartaric acids, racemic acid, and some derivatives, A., 28.

Coops, J., jun. See also Bödecker, J., Cohen, E., and Verkade, P. E.

Copaux, A. See Copaux, H.

Copaux, H., and Copaux, A., determination of coloured gases by means of the photo-electric cell, and its application to nitrous vapours, B., 126.

Copaux, H., and Matignon, C., different states of beryllium oxide, A., 37*.

Cope, H. See Dehn, W. M.

Coppee, E., & Cie., coke ovens, (P.), B., 38.

Copthorne, H. N., and Illinois Graphite Co., penetrating oil and lubricant, (P.), B., 526.

Couquelin, R., determination of gold in organic substances, A., 648.

Corbet, A. S., and Woodman, R. M., hydrolysis of potassium cuprocyanide by sulphuric acid, A., 922.

Corbet, A. S. See also Woodman, R. M.

Corbet, S. See Boutaric, A.

Corbett, L. W., and Thompson, H. C., physical and chemical changes in celery during storage, B., 846.

Corbin, R. M. See Bradley, M. J.

Corbissley, S. G. See Rowe, F. M.

Corbit, H. B. See Bogert, M. T.

Corby F. J. See Morgan, G. T.

Corby, R. L., Glasgow, R., and Fleischmann Co., preparing yeast nutrient solutions and manufacturing yeast therefrom, (P.), B., 337.

Cordebarb, H. See Hollande, A. C.

Cordeiro, N., alveolar carbon dioxide tension following vigorous exercise, A., 854.

Corfier, G. See Ducloux, E.

Corell, M. See Farbw. vorm. Meister, Lucius, & Brüning.

Corey, R. B. See Laubengayer, A. W.

Corfield, S. H., oil shale retort, (P.), B., 119.

Cori, C. F., fate of sugar in the animal body. I. Rate of absorption of hexoses and pentoses from the alimentary tract, A., 429.

Cori, C. F., and Cori, G. T., fate of sugar in the animal body. II. Relation between sugar oxidation and glycogen formation, in normal rats and rats treated with insulin, during absorption of dextrose. III. Rate of glycogen formation in liver during absorption of dextrose, kevulose, and galactose, A., 1271.

Cori, G. T. See Cori, C. F.

Cork, J. M., and Stephenson, B. R., γ -emission spectra for the elements tin (50) to lanthanum (72), A., 651.

Cork, J. M. See also Stephenson, B. R.

Corley, R. C., catabolism of amino-acids. I. Fate of γ -aminobutyric and δ -amino-
valeric acids in the phloridzinised dog, A., 1171.

Corley, R. C., fate of sugar in the animal body. I. Fate of xylose administered intravenously to the rabbit, A., 1271.

Corley, R. C., and Denis, W., determination of calcium in tissues, faeces, and milk, A., 444.

Corley, R. C., and Rose, W. C., nephropathic action of dicarboxylic acids and their derivatives. V. Alkyl-, hydroxy-, and keto-acids, A., 750.

Corley, R. C. See also Denis, W.

Cormack, G. A., fat content of breads and cereals, A., 1183.

Cornelius, C. E., and Trollhättans Elektrothermiska Aktiebolag, producing zinc or zinc and lead, (P.), B., 97*.

Cornelius, H. G. E., manufacture of iron and steel alloys, (P.), B., 753.

Cornelius, H. G. E. See also Flodin, H. G.

Cornell, E., Jun., and Westinghouse Electric and Manufacturing Co., treating [zinc-coated] materials, (P.), B., 133.

Cornet, E., grates for shaft furnaces, (P.), B., 34*.

Cornillot, A., constitution of chlorine derivatives of the phthalonic acid series, A., 168.

esters of bisphthalidecarboxylic acids, A., 291.

Corning Glass Works, and Taylor, W. C., glass batch, (P.), B., 408.

Corning Glass Works. See also Taylor, W. C.

Cornubert, R., and Borrer, C., action of benzaldehyde on cyclic ketones, A., 952.

Cornwell, C. W., and Jones, A. J., assay of extract of aconite, B., 801.

Cornwell, R. T. K. See Orndorf, W. R.

Correll, A. See Zeech, M. Stinnes.

Correns, C. W., mechanical force exerted by growing crystals, A., 666.

Corse, W. M., metallurgy fifty years ago and now, B., 832*.

Corson, M. G., manufacture of copper alloys, (P.), B., 885.

Corti, A., and Chemical Works Flora, manufacturing a perfume smelling like amber, (P.), B., 173.

Coryllas, P. See Chambers, W. H., and Page, J. H.

Coaden and Co. See Koontz, F. B.

Coslett, T. W., treatment of iron or steel for preventing oxidation or rusting, (P.), B., 283.

Cosnic Arts, Inc., treatment of natural alkaline salts, (P.), B., 51.

Cosson, A. N. See Brady, O. L.

Costaguta, D., agent for raising the calorific power of motor fuels, (P.), B., 430.

fuels for internal-combustion engines, (P.), B., 733*.

Coster, D., Hevesy, G. von, and Naamli. Vennots. Philips Gloeilampenfabr., separating hafnium and zirconium, (P.), B., 440* 631*.

Coster, D., and Mulder, F. P., X-ray levels of the elements copper (29) to lanthanum (57), A., 987.

Coster, D., and Tunk, J. H. van der, fine structure of the X-ray absorption edge in the K-series of argon and its possible interpretation, A., 550.

X-ray absorption spectrum of argon, A., 766.

Coster, D. See also Naamli. Vennots. Philips Gloeilampenfabr., and Prins, J. A.

Cotton, A., and Descamps, R., photographic spectro-polarimeter for the ultraviolet region, A., 142.

age of radium-bearing rocks in Australia, A., 934.

Cottrell, W. P., filter, (P.), B., 144.

Cottringer, P., Collings, W. H., and Dow Chemical Co., method of making anhydrous magnesium chloride, (P.), B., 191.

Cottringer, P., Heath, S. B., and Dow Chemical Co., making metallic magnesium, (P.), B., 196.

Couch, J. F., relative toxicity of the lupin alkaloids, A., 510.

Coulier, S., purification of gases, (P.), B., 573.

Coulson, F. A. See Chataway, F. D.

Cournot, J., cementation of ferrous alloys with aluminium, B., 265.

metallic cementation and the coating of ferrous alloys with aluminium, B., 633.

Cournot, J., and Bary, J., electrolytic coatings on aluminium and light alloys, their adherence and resistance to corrosion by sea-water, B., 1018.

Cournot, J., and Sasagawa, K., viscosity of heated alloys, A., 17*.

variation with temperature of the resistance to impact of steel, B., 121.

viscosity of alloys at high temperature, B., 161.

Cournot, J. See also Guillet, J.

Courtauds, Ltd., and Crigall, J. E., nozzles for use in the production of artificial filaments, threads, and the like, (P.), B., 976.

Courtauds, Ltd., Glover, W. H., and Weyenbergh, E. van, production of cellulose compounds [ether-esters], (P.), B., 48.

Courtauds, Ltd., Hegan, H. J., and Bayley, F., manufacture of [hollow] threads, filaments, bands, and the like from viscose, (P.), B., 739, 1008.

Courtauds, Ltd., Napper, S. S., and Gardner, H. D., manufacture of [hollow] threads, filaments, bands, and the like from viscose, (P.), B., 739.

Courtauds, Ltd., and Whittaker, C. M., manufacture of artificial silk, (P.), B., 782.

Courtauds, Ltd. See also Glover, W. H., Hegan, H. J., Lunge, E., and Weyenbergh, E. van.

Courtines, N. M. See Abadie, J. B. J. M.

Courtot, C., and Bonnet, J., the π of [minimal concentration of acid for] sulphonation, A., 605.

Courtot, C., and Dondelinger, A., indanyl bases, A., 59.

Courtot, C., and Krolkowski, J., preparation of 1-hydrindone, A., 293.

Courtot, C., and Petitcolas, P., optical study of benzyl and indanyl bases, A., 607*.

Courtot, C., and Pomonis, C., [nitro]diphenylene sulphides, A., 605.

Cousen, A., English, S., and Turner, W. E. S., commercial sillimanite as a refractory material. III. Resistance to corrosion by glass, B., 240.

Cousen, A., and Turner, W. E. S., commercial sillimanite as a refractory material. 1. Choice of bonding material and of grain size, B., 239.

commercial sillimanite as a refractory material. II. Porosity, density, and mechanical strength of sillimanite-ball clay mixtures, B., 239.

Cousin, A., agglomeration of ores, B., 60.

Coutant, A. A., manufacture of lime-silica bricks, (P.), B., 409.

Coutie, A., termolecular reactions; reduction of silver acetate by sodium formate, A., 580.

Coutin, M. See Zimmern, A.

Couts, J. R. H., and Crowther, E. M., source of error in the mechanical analysis of sediments by continuous weighing, B., 31, 303*.

Couts, J. R. H. See also Keen, B. A.

Couture, E. See Florence, G.

Couturier, H. See Lumière, A.

Coward, H. F., and Hartwell, F. J., extinction of methane flames by diluent gases, A., 805.

limits of inflammability of firedamp in atmospheres which contain blackdamp, B., 426.

Coward, H. F., and Wheeler, R. V., ignition of firedamp, B., 179.

Coward, K. H. See Drummond, J. C.

Cowen, L. G. See Finch, G. I.

Cowgill, G. R. See Smith, A. H.

Cowles, A. H., and Electric Smelting & Aluminum Co., process of producing alumina, alkali, and dicalcium silicate, (P.), B., 743.

Cowles, M. W., electrolytic cell, (P.), B., 134.

Cowperthwaite, J. A. See MacInnes, D. A.

Cox, C. R., double chlorination [of water], B., 774.

Cox, E. H. See Dohme, A. R. L.

Cox, F. J., refractory diaphragms for use in surface-combustion apparatus, (P.), B., 148*.

Cox, G. J., and Rose, W. C., can purines, creatinine, or creatine replace histidine in the diet? Availability of synthetic glyoxalines in supplementing diets deficient in histidine, A., 973.

Cox, G. J. See also Rose, W. C.

Cox, H. E., occurrence of arsenic in apples, B., 338.

Cox, H. L., and Cretcher, L. H., influence of temperature on the reciprocal solubility of the monalkyl ethers of ethylene glycol and water, A., 344.

Cox, K., and McDermott, P. J., purification of benzol and similar hydrocarbons, (P.), B., 264.

Cox, K. V., action of anhydrous aluminium chloride on nonane and on cyclohexane, A., 267.

Coxe, A. E. See Carter, C. B.

Coxon, T. See Synthetic Ammonia & Nitrates, Ltd.

Cozens, A. A., and Gas Light and Coke Co., softening of hard calcareous materials such as water-laid deposits and incrustations [scale], (P.), B., 424.

Crabtree, J. I., and Dundon, M. L., effect of desensitisers in development, B., 853.

Crabtree, J. I., and Eastman Kodak Co., preservative for motion-picture films, (P.), B., 220.

Crabtree, J. I., and Ross, J. F., recovery of silver from exhausted fixing baths, B., 933.

Craig, R. See Lever Bros., Ltd.

Craig, T. J. I., and Spence & Sons, Ltd., P., fireproofing textile fibres and fabrics, and other porous or absorbent substances, (P.), B., 152, 739*.

Cramer, E. See Siemens-Schuckertwerke G.m.b.H.

Cranston, J. A., and Livingstone, A. Y., comparison of some of the physical properties of alkali cyanates and azides, A., 458.

Craven, E. C. See Ormandy, W. R.

Crawford, A. B. See Wilson, F. J.

Crawford, P. H., and Abbema, J. F., filtering apparatus, (P.), B., 224.

Crawford, R. A. See Evans, W. L.

Crawford, R. M., elimination and recovery of phenols from crude ammonia liquors, B., 318.

recovery of phenols and cresols, (P.), B., 527.

Cray, F. M., colour change of Congo-red in acidified acetone-water solutions, A., 1101.

Cray, F. M., and Westrip, G. M., preparation of solutions of standard hydrogen-ion concentration and the measurement of indicator ranges in an acetone-water mixture containing 10% by volume of water, A., 374.

Cray, F. M. See also Brownson, T. K.

Crede, E., astrignency of vegetable tanning materials, B., 138.

Credo, V., and Louisville Drying Machinery Co., drying, (P.), B., 301.

Gregor, N. M. See Hoffman, C.

Crehore, A. C., forces of chemical affinity; crystal structure in the light of the new atomic models, A., 561.

Creighton, H. J. M., solubility and electrolytic conductance of methylene-phosphinous acid, A., 1104.

Creighton, M. See Dutcher, R. A.

Crezap, E., gravimetric determination of sodium, A., 1019.

Crespi, E., and Otto, M. P., bleaching textiles by means of ozone, (P.), B., 357.

Crespi, M., and Moles, E., adsorption of gases by glass walls. II. Ammonia, A., 1002.

adsorption of gases by glass walls. III. Sulphur dioxide, A., 1200.

Cretcher, L. H., Koch, J. A., and Pittenger, W. H., synthesis of 5- β -hydroxy-ethylbarbituric acid and its alkyl derivatives, A., 180.

Cretcher, L. H. See also Cox, H. L.

Creutzfeldt, W. H., addition of substances to pickling baths in the metal industries, B., 752.

Crichton, A. See Elliot, W.

Criggall, J. E. See Courtauds, Ltd.

Crimp, A. A., [incorporating graphite with] bearing material [metal], (P.), B., 638*.

Crippa, G. B., pyrogenic transformation of α -aminoazo-compounds into triazoles, A., 307.

Crippa, G. B. See also Charrier, G.

Crist, D. M., and Triumph Steel Co., metallising fine ore concentrates, (P.), B., 984.

Crist, J. W., effect of nutrient conditions on the colloidal properties of certain vegetable crops, B., 842.

Criswell, *K. J.* See Shaughnessy, *H. J.*
 Crites, *J.*, and Raymond Bros. Impact Pulverizer Co., pulverising, feeding, and burning fuel, (P.), B., 263*.
 Crites, *J.* See also Raymond Bros. Impact Pulverizer Co.
 Crittenden, *E. D.* See Almqvist, *J. A.*, and Wyckoff, *R. W. G.*
 Crossdale, *S.*, concentration of oxidised ores, (P.), B., 330.
 Crocker, *E. C.*, systematic detection of traces of aldehydes, A., 84*.
 Croco, *C. W.*, and Lowy, *A.*, electrochemical chlorination and bromination of benzene, A., 1111.
 Croese, *D.*, manufacture of metals and alloys, (P.), B., 674.
 Croftoof, *E. H.*, and Larrowe Construction Co., anti-freezing solution, (P.), B., 521.
 Croft, *C. M.* See Ellis, *C. H.*
 Crofts, *E. E.* See MacLeod, *G.*
 Croftt, *G. B.*, *L*-absorption limits of tungsten; photometric measurements, A., 652.
 Croll, *A. G.*, and Atlas Portland Cement Co., making cement, (P.), B., 56.
 Crommelin, *C. A.*, Onnes, *H. K.* and Swallow, *J. C.*, rectilinear diameter of helium, A., 774*.
 Crompton, *A.*, [machines for] calico printing, (P.), B., 700*.
 Croner, *F.*, fluorescence of oils in ultra-violet light, B., 836.
 Cronheim, *G.* See Pincussen, *L.*
 Cronin, *J. J.* See Goggin, *J. K.*
 Cronshaw, *C. T.* See British Dyestuffs Corporation.
 Crook, *W. J.*, and Pacific Coast Steel Co., low-carbon steel for structural purposes, (P.), B., 753.
 Crosbie, *S.*, and Collard, *C. H. F.*, muffle kilns [for ceramics etc.], (P.), B., 918.
 Crosby, *E. R.*, and Aluminum Manufacturers, Inc., alloy, (P.), B., 330.
 Crosnier, *G. R. E.*, antiseptic, (P.), B., 998.
 Cross, *C. F.*, and Engelstad, *A.*, manufacture of lignone derivatives and their application, (P.), B., 633.
 Cross, *R.*, materials for refining hydrocarbon oils, (P.), B., 120*.
 process of treating hydrocarbons, (P.), B., 700.
 treating [dehydrating] hydrocarbons, (P.), B., 733.
 Crosser, *D. H.*, and Chicago Crucible Co., treating metals, (P.), B., 283.
 Crossley, *M. L.*, and Simpson, *G. S.*, sulphonating β -naphthol, (P.), B., 234.
 Crosthwaite, *P. M.*, recent examinations of steel and iron specimens exposed at Colombo, Halifax, Plymouth, and Auckland, B., 882.
 Crotogino, *H.*, decomposition of alloys rich in iron, (P.), B., 884.
 Crow, *F. B.* See Smith, *J. C.*
 Crow, *L.*, magnetic susceptibility of rubidium bromide, caesium iodide, krypton, xenon, [potassium, rubidium, and caesium], A., 14.
 Crow, *T. B.*, soft soldering of copper, B., 325, 791*.
 Crowcroft, *A.*, means for supplying heated air to furnaces and the like, (P.), B., 521*.
 Crowe, *T. B.* See Mills, *L. D.*
 Crowell, *R. B.*, Breckenridge, *U. F.*, and Western Industries Co., producing alkali xanthates, (P.), B., 13.
 Crowell, *R. B.*, and Western Industries Co., producing light basic magnesium carbonate, (P.), B., 321.
 Crown Willmette Paper Co. See Thomson, *A. M.*
 Crowther, *E. M.* See Coutts, *J. R. H.*, and Keen, *R. A.*
 Crowther, *R. E.* See Kodak Ltd.
 Crozemarie, *M.* See Malvos, *R.*
 Crozier, *R. H.*, vertical retorts for the distillation of shale and like materials, (P.), B., 228.
 fractionation of hydrocarbon oils and like liquids, (P.), B., 479*.
 Crozier, *R. N.* See Clark, *R. H.*
 Crudeli, *U.*, models of the helium atom, A., 880.
 Cruckshank, *(Miss) E. M.*, mineral content of pasture-grass and its effect on herbivora. IV. Seasonal variations in mineral content of pastures, B., 251.
 Cruckshank, *J.* See Findlay, *A.*
 Crut, *G. L. A.* See Maison Breton.
 Crummett, *A.*, standardisation of methods of testing the fastness of dyes, B., 976.
 Cryer, *J.*, reaction of acetyl derivatives of organic acids with benzene and aluminium chloride, A., 294.
 Csapó, *J.*, alkali content of the blood-serum of normal and diseased children, A., 426.
 Csapó, *J.*, and Henszelmann, *S.*, binding of alkali by blood-serum of children, A., 634.
 Csapó, *J.*, and Mihalovics, *G.*, acid-combining power of the blood of healthy and diseased children, A., 192.
 Csanka, *F. A.*, Murphy, *J. C.*, and Jones, *D. B.*, isoelectric points of various proteins, A., 534.
 Cuddy, *L. B.*, cracking of [hydrocarbon] oils, (P.), B., 1005.
 Cullen, *G. E.*, Keeler, *H. R.*, and Robinson, *H. W.*, the pK' of the Henderson-Hasselbalch equation for blood-serum, A., 192.
 Cullen, *J. F.*, Harper, *T. E.*, and United States Smelting, Refining, & Mining Co., extracting potassium and phosphorus from rocks, (P.), B., 744.
 Cullings, *W. R.* See Cottringer, *P.*
 Culmer, *H. H.*, coking coal, (P.), B., 861.
 Cumming, *W. M.*, and Ferrier, *G. S.*, reactions of azoxy-compounds. I. Action of light, A., 162, 394.*
 Cumming, *W. M.*, and Good, *W.*, determination of ferro- and ferri-cyanides, A., 1019.
 Cumming, *W. M.* See also Brown, *D. G.*
 Cummings, *A. D.*, mechanical condition of ammonium sulphate, B., 11.
 Cunliffe, *P. W.*, Franklin, *R. G.*, Maddison, *R. E. W.*, and Reeve, *L.*, photochemical technique. III. Quartz mercury lamp, A., 1112.
 Cunliffe, *R. W.*, chlorophenol tastes in Milwaukee's water supply, B., 301.
 Cunningham, *O. B.*, and National Aniline & Chemical Co., manufacture of 2-anilinoanthraquinone, (P.), B., 186.
 Cunradi, *K.*, autoelectronic discharge, A., 1069.
 Cupr, *V.*, absorption of gaseous hydrogen chloride by sulphuric acid, A., 17.
 absorption of hydrogen chloride and sulphur dioxide in sulphuric acid and acetic acid, A., 671.
 Curie, *(Mme.) I.*, extraction and purification of the active deposit of long life from radium, A., 5.
 Curie, *(Mme.) I.*, and Behounek, *F.*, ionisation curves of rays from radium-C', A., 656.
 Curie, *(Mme.) I.*, and Mercier, *M. P.*, distribution of the range of α -particles from radium-A and radium-C, A., 1190.
 Curie, *(Mme.) I.*, and Yamada, *N.*, long-range α -particles emitted by radioactive substances, A., 220.

Curie, *(Mme.) P.*, application of the Compton theory to β - and γ -rays from radioactive substances, A., 656.
 Curme, *G. O., jun.*, and Young, *C. O.*, [use of] ethylene glycol [as anti-freeze material], B., 1.
 Curran, *J. J.* See Gilligan, *F. P.*
 Currie, *L. M.*, antimony sulphides, B., 449.
 Curry, *E. R.*, green scrummaging [on fireclay], B., 878.
 Curtiz, *K.* See Mannich, *C.*
 Curtis, *H. L.*, and McPherson, *A. T.*, dielectric constant, power factor, and resistivity of rubber and gutta-percha, B., 503.
 Curtis, *W. E.*, new series in the secondary hydrogen spectrum, A., 445.
 Curtiss, *L. F.*, natural β -ray spectrum of radium-D, A., 450.
 decay of radium-E, A., 771.
 Curtius, *T.*, and Bertho, *A.*, action of carbonyl azide, CON_2 , on aromatic hydrocarbons, A., 509.
 action of carbazide and of azoimide under pressure on aromatic hydrocarbons; conversion of benzene derivatives into pyridine derivatives. I. and II., A., 1152.
 Curtius, *T.*, and Jeremias, *B.*, interaction of benzylsulphonazide with ethyl malonate, A., 415.
 Curtius, *T.*, and Kenngott, *E.*, normal hydrazide and azide of phenylpropionic acid, A., 724.
 Curtius, *T.*, and Klavehn, *W.*, interaction of *p*-toluenesulphonazide with malonic and substituted malonic esters, A., 416.
 Curtius, *T.*, and Stoll, *W.*, hydrazides and azides of acetyl sulphanilic and sulphonic acids, A., 393.
 Curtius & Co., *F.*, production of copper from spent pyrites, (P.), B., 952.
 Cushing, *D.* See Barrett Co.
 Cushman, *O. E.* See Hanna, *R. W.*
 Cushing, *A. R.*, optical isomerides. VIII. Influence of configuration on the activity of tropine, A., 1273.
 Cusumano, *A.*, influence of boron on plants, B., 764.
 Cutthbertson, *D. P.*, distribution of phosphorus and fat in the resting and fatigued muscle of the cat; partition of phosphorus in the blood, A., 198.
 Cutler-Hammer Manufacturing Co. See Richardson, *J. T.*, and Schmidt, *E. N.*
 Cycle Co. See Coe, *H. S.*
 Czaniak, *E.*, influence of narcotics on surface tension, A., 200.
 Czapak, *E.*, and Weingand, *R.*, dissolving device, (P.), B., 305*.
 Czapak, *E.* See also Wolff & Co.
 Czerny, *O.*, composition of oils of Bucovinian fir trees, B., 218.
 Czerny, *W.* See Grin, *A.*
 Czerwinski, *J.* See Jellinek, *K.*

D.

Daboust, *C.*, recovered fatty matter, B., 923.
 Dachsel, *E.*, potentiometric determination of aromatic nitroso- and nitro-compounds by means of titanous chloride, A., 1049.
 Dachsel, *E.* See also Müller, *E.*
 Dadlez, *J.*, excretion of intravenously injected calcium, A., 753.
 Daedeke, *H.*, mathematical-statistical investigation of the sub-electron. II., A., 554.
 Daevies, *K.*, resistance to corrosion of Thomas and Siemens-Martin steels containing copper, B., 545.
 influence of silicon on the magnetic properties of steel, B., 983.
 Dafer, *O.*, ashing of small amounts of material, A., 139.
 Dafer, *O.* [with Gund, *F.*, Müller, *O.*, and Nitsche, *A. J.*], cyclamen, A., 1146.
 Dafer, *O.*, and Erdödy, *F. G.*, influence of manuring with calcium chloride on some crops, B., 416.
 Dafer, *O.*, and Melinski, *Z. A.*, compounds of arsenic halides with pyridine, A., 622.
 Dahl, *O.* See Masing, *G.*
 Dahlberg, *H. W.*, process of manufacturing yeast, (P.), B., 295, 459*.
 Dahlberg, *H. W.*, and Great Western Sugar Co., manufacturing alcohol by fermentation, (P.), B., 563.
 Dahmen, *W.*, spark spectrum of potassium, A., 214.
 Dahn, *T. M.*, organic absorption media as colour screens in the ultra-violet, A., 1185.
 Dailey, *M. E.* See Fremont-Smith, *F.*
 Daimler, *K.* See Farbw. vorm. Meister, *Lucius, & Brüning*, and I. G. Farbenind. A.-G.
 Dains, *F. B.*, and Davis, *S. I.*, reactions of the formamidines. XI. 2-Thion-4-thiazolidones, A., 530.
 Daji, *J. A.* See Sahasrabuddhe, *D. L.*
 Dakin, *H. D.*, metabolism of amino-acids and fatty acids, A., 428.
 Dakin, *H. D.* See also Benedict, *E. M.*
 Dale, *A. J.*, premature failure of combustion chamber material, B., 980.
 Dale, *H. H.* See Best, *C. H.*
 Dales, *B.*, Cable, *W. S.*, and Goodrich Co., *B. F.*, method of making moulded rubber articles, mould and lubricant therefor, (P.), B., 555.
 Dallisen, *J. van.* See Aten, *A. H. W.*
 Dallwitz-Wegner, *R. von.* lubrication problem from the thermodynamic-molecular standpoint, and the measurement of the efficiency of lubricants, B., 349.
 simple viscosimetry with scale [for oils], B., 940.
 Dally, *M.* See Pummerer, *R.*
 Dallyn, *F. A.*, and DeLaPorte, *A. V.*, recent research in sewage disposal, B., 725.
 Dalmer, *O.* See Eichholz, *W.*, and Neuberg, *C.*
 Dalsace, *J.*, and Guillaumin, *C. O.*, effect of ovariectomy on calcium and phosphorus metabolism, A., 1056.
 Dalstrom, *F.*, catalytic action of iron and copper compounds in the bleaching of vegetable fibres with sodium perborate or perborate detergents, B., 740.
 Dalton, *P.* See McCurdy, *W. H.*
 Damard Lacquer Co., Ltd. See Fleet, *W. F.*
 Damianos, *D.*, glowing of lead wire, A., 667.
 Damianovitch, *H.*, chemical inertia of the monatomic gases from the point of view of the electronic theory of the atom, A., 657.
 Damiens, *A.* See Lebeau, *P.*
 Damiens, *A. A. L. J.*, recovery of carbon monoxide from industrial gases, (P.), B., 177, 1014.
 Damiens, *A. A. L. J.*, De Loisy, *M. C. J. E.*, and Piette, *O. J. G.*, rapid fixing of ethylene by means of sulphuric acid for the purpose of obtaining ethyl-sulphuric esters, (P.), B., 341*.

Damjans, A. J., *L. J.*, De Loisy, M. C. J. E., and Piette, O. J. G., manufacture of ethylsulphuric acid, (P.), B., 692*.
rapid fixing of ethylene by sulphuric acid to obtain neutral ethyl sulphate, (P.), B., 1029.

Damle, N. R. See Sudborough, J. J.

Dana, L. I., latent heat of vaporisation of liquid oxygen-nitrogen mixtures, A., 508.

Danaila, N., chemical composition of Rumanian petroleum oils, B., 258.

Danaila, N., and Blum, I., rational utilisation of Rumanian lignite. I. Distillation at low temperatures, B., 652.

Danaila, N., and Melinescu, E., determination of olefinic, aromatic, and saturated hydrocarbons in petroleum and tar oil fractions, B., 476*.

Danaila, N., and Popa, N., utilisation of aromatic hydrocarbons in petroleum fractions. I. Preparation of *o*-trinitrotoluene, B., 478*.

Danckwardt, P., cracking [hydrocarbon] oil, (P.), B., 863.

Danckwirt, P. W., and Pflau, E., detection of bismuth in organic material, A., 328.

Danckwirt, P. W., and Siebler, G., bromometric determination of the cresols, B., 942.

Dandurand. See Bonnard.

Daniel, R. J., and Doran, W., constituents of the mussel (*Mytilus edulis*), A., 970.

Daniel, W. See Strecker, W.

Daniel, S. D., Kalling, B. M. S., and Aktiebolaget Ferroleggeringar, process for producing metals and alloys, (P.), B., 18*.

Daniels, A. L., and Stearns, G., nitrogen and mineral balances in infants receiving cow's or goat's milk, A., 197.

Daniels, F., infra-red absorption spectra; solutions of nitrogen pentoxide and nitrogen tetroxide in organic liquids, A., 103.
photochemical inactivity of infra-red radiation with special reference to the decomposition of nitrogen pentoxide, A., 483.

Daniels, F. See also Rushton, F. R.

Daniels, L. C., and National Aniline and Chemical Co., digestion and filtration apparatus, (P.), B., 114.

Daniels, L. C. See also Rogers, D. G.

Daniels, S., sand-cast aluminium-manganese alloys, B., 280.
specifications for aero-alloys, B., 326.
properties of sand-cast alloys of aluminium containing silicon and magnesium, B., 494.
sand-cast alloys of aluminium containing cobalt, B., 710.

Daniels, S., Zimmerman, A. C., and Watson, J. A., treatment of aluminium, magnesium, their alloys and other metals, to render them impervious to fluids, and to inhibit corrosion, (P.), B., 591*.

Danleson, R. R., and Lindemann, W. C., testing the cross-bending strength of enamels, B., 158.

Danilov, S., and Venus-Danilova, (Mrs.) E., isomerisation of aldehydes to ketone; and its relation to the dehydration of *o*-secondary-tertiary hydrobenzoin glycols, A., 519.
isomerisation of disubstituted aldehydes to ketones, A., 726.
isomerisation of aldehydes to ketones; isomerisation of di-*p*-tolylacetaldehyde to *p*-deoxyltoluol, A., 830*.

Danilov, V. K. See Smorodinev, I. A.

Danilovitsch, A. I. See Petrov, G. S.

Dankmeier, W. See Schmitt, O.

Danneel, H., simultaneous manufacture of ammonium chloride and sulphate, especially for fertilisers, (P.), B., 139.

Dannenberg, H. See Freundlich, H., and Hauser, E. A.

Dannenberg, S. J. See Lanhoffer, J. E.

Danner, E., manufacture of sheet glass, (P.), B., 158*, 948*.

Danner, P. S., and Standard Oil Co., recovery of metallic halides from hydrocarbon sludges, (P.), B., 575.

D'Ans, J., and Jäger, A., [swelling] action of caustic soda on cellulose pulp, B., 398.
ripening of viscose solutions, B., 532, 738.

Dans, A. See Charrer, G., and Gorini, L.

Danz, H. See Magnus, A.

Danzer, W., organo-lead compounds, A., 388.

D'Arbouet, B., gluten, B., 688.
breadmaking, B., 993.

Derbyshire, O., three-dimensional reproduction of tracks of β -particles ejected by X-rays, A., 1076.

Darmont, L., double-fluid [electric] cells, (P.), B., 551.

D'Arleux, R. M., and Violette, E., [tunnel] kilns or ovens for baking pottery, (P.), B., 918.

Darmois, E., case of mutarotation, and its application to the study of the hydrolysis of ethyl oxalate by water and dilute acids, A., 133.
influence of boric acid on the rotatory power of malic acid and tartaric acid. I. Borio-malic complexes, A., 337.
mutarotation of mixtures of molybdates and ethyl malate; probable constitution of the molybdomalate derivatives, A., 457.
rotatory power and p_{H} values of molybdomalic acid complexes; physico-chemical applications of polarimetry, A., 559, 778.
effect of salts on rotatory power, A., 661.
influence of boric acid on the rotatory power of malic and tartaric acids. II. Boric-tartaric complexes, A., 1201.

Darmois, E., and Gabiano, P., polarimetric study of inorganic and organic dimolybdomalates; application of the law of Oudemans, A., 271.

Darragh, W. A., heating gases [air] for drying, (P.), B., 345.

Darrin, M., and Koppers Co., recovery of thiocyanates and thiosulphates, (P.), B., 236.
recovery of thiocyanates, (P.), B., 583.

D'Arsonval, and Bordas, F., determination of dust in the atmosphere, B., 390.

Dart, E. E. P. See Wardlaw, H. S. H.

Darwin, C. G., optical constants. I. Optical behaviour of certain atomic models. II. Lateral scattering from a gas, A., 7.
mechanical models for the Zeeman effect, A., 216.
gyration of light by multiple lines, A., 994.

Darwin, C. O. See also Bragg, W. L.

Darzens, G., synthesis of tetraphenylphthalenes and naphthalenes, A., 1239.

Das, J. See Brahmachari, U. N.

Das, S., determination of available phosphoric acid of calcareous soils, B., 456.

Da Silva, M. A. See Laporte, M.

Dassbach, A., and Irvington Smelting and Refining Works, electrolytic [metal] separation apparatus, (P.), B., 444.

Dastur, R. H., relation between water content and photo-synthesis, A., 98.

Datta, G. L., degree of polarisation of resonance fluorescence of sodium vapour excited by the D_1 -line, A., 776.

Datta, S. K. See Ghosh, P. N.

Damb, G. See Wilson, J. A.

Dambek, G. See Daubek, J. F.

Dambek, J. F., and Daubek, G., increasing the nutritive value of food, (P.), B., 766.

Dambney, C. G., and Zilva, S. S., action of reducing agents on the antiscorbutic factor inactivated by aeration, A., 871.

antiscorbutic fraction of lemon juice, IV., A., 1181.

Daure, P., fluorescence of bromine vapour, A., 884.

Dauvillier, A., biological action of X-rays of different wave-lengths, A., 199.
electric discharge in gases and the accompanying radiations, A., 330.
nature of soft X-rays, A., 551.
extension of X-ray spectra towards the ultra-violet; the K spectrum of carbon, A., 649.
spectrography of X-rays of large wave-length, A., 875.
spectrographic junction between the X-ray region and the extreme ultra-violet, A., 1072.
characteristic low-frequency series of oxygen and nitrogen; spectrographic junction between X-rays and the extreme ultra-violet, A., 1185.
electric discharge in gases and the accompanying radiations, A., 1196.

Dauvillier, A. See also De Broglie, M., and Waterman, H. I.

Davey, G. W. See Waite, F. H.

Davey, W. C., spraying [rubber] latex with protective colloids, B., 167.
experiments with unmastered rubber, B., 924.

Davey, W. F., lattice parameter and density of tungsten, A., 112.
super-conducting state of copper, A., 1086.

Davey, W. P. See also Drophry, D. H.

Davey, W. S. See Martin, G.

David, L., determination of quinine, B., 172.

David, L. F., and Félixat, G., treatment of oily vegetable materials for the separate recovery of their constituents, (P.), B., 957, 1020*.

David, W. T., pressures developed on explosion of gaseous mixtures at high densities, A., 341.
radiation in gaseous explosions, A., 693.
combustion in gas engines, B., 617.

David, W. T., Richardson, S. G., and Davies, W., effect of infra-red radiation on the combustion of gaseous mixtures containing nitrogen, A., 585.

Davidsen, M. J., manufacture of enamelled objects, (P.), B., 542.

Davidsen, V., determination of salt in soap, B., 553.
determination of the titer of tallow, B., 712.

Davidson, B. M., intoxication. VII. Effect of caffeine. VIII. Influence of oxygen, A., 91.

Davidson, D., and Baudisch, O., preparation of uracil from carbamide, A., 1154.

Davidson, G. A. See Halloran, R. A.

Davidson, J. G., glycol ethers and their use in the lacquer industry, B., 714.

Davidson, L. F., conditions governing the behaviour of silver bromide grain during development. II., B., 515.

Davidson, L. F. See also Baker, T. T.

Davidson, W. B., Michie, A. C., and Muddiman, E. W., distillation [dehydration] of tar, (P.), B., 815.

Davidson & Co., Ltd., and Whitmore, J., dust collectors or separators, (P.), B., 304.

Davies, (Miss) A. C., and Horton, F., transmutation of elements, A., 221.

Davies, (Miss) A. C. See also Andrewes, (Miss) U.

Davies, C. jun., open-hearth furnace, (P.), B., 97.
manufacture of pig iron, (P.), B., 711*.

Davies, D. T., Dickens, F., and Dodds, E. C., preparation, properties, and source of the parathyroid hormone, I., A., 980.

Davies, G. R. See Morgan, G. T.

Davies, H., and Adam, M. A., decolorising of tinned-iron scrap, (P.), B., 97*.

Davies, H., and Hartley, H., determination of traces of carbon monoxide, B., 637.

Davies, J. E. See Johnston, J. M. T.

Davies, J. S. H. See Rowe, F. M.

Davies, R. W., aspects of coke-oven heating in the light of modern tendencies in design, B., 426.

Davies, W., and Leeper, G. W., rule of the conservation of type of substitution in aromatic substances. I. Chlorination of 2-chloro-4-nitrotoluene, A., 827.

Davies, W. See also David, W. T.

Davies, W. L., proteins of green forage plants. I. Proteins of some leguminous plants. II. Proteins of the mangold root; comparison with proteins of mangold seed, A., 761.
fish meals. II. Changes occurring in the water-soluble nitrogen and in the amount of water-soluble phosphorus with different methods of treatment and storage, B., 212.

Davignon, V. D., gold alloy, (P.), B., 63.

Davis, A. R. See Hoagland, D. R., and Lipman, C. B.

Davis, C. B., activating decolorising char for use in refining sugar, (P.), B., 170.
synthetic bone char from black-strap syrup, (P.), B., 815.
purifying carbohydrate solutions, (P.), B., 844.

Davis, C. C. See Bierer, J. M.

Davis, C. W., composition and age of uranium minerals, A., 380.
analysis of copper-palladium-gold-silver concentrates, B., 589.

Davis, D. S., freeness of sulphite pulp, B., 660.

Davis, D. S. See also Calingaert, G.

Davis, F. W., ball or tube mills for grinding or crushing, (P.), B., 392.

Davis, G. H. S. See Whitman, W. G.

Davis, H. L. See Nelson, R. E.

Davis, H. S., measurement of vapour tension of "gasoline" and other liquids, A., 17*.

Davis, H. S., and Murray, W. J., aliphatic tertiary alcohols and their industrial possibilities, B., 849.

Davis, J. D., and Byrne, J. F., influence of moisture on the spontaneous heating of coal, B., 316.

Davis, J. D., and Reynolds, D. A., coking constituents of Mesa Verda and Pittsburgh coals, B., 858.

Davis, M. H. See Vickery, J. C.

Davis, N. R., and Burch, C. R., single electrode aro, A., 378.

Davis, N. R. See also Burch, C. R.

Davis, P. W., refining lead, (P.), B., 134.

Davis, R., relation between intermittent and non-intermittent sector wheel photographic exposures, B., 932.

Davis, R. O. E., colloid determination in mechanical analysis [of soils], B., 102.

Davis, S. I. See Dains, F. B.

Davis, T. L., coating for nitrocellulose powder grains, (P.), B., 110.

 explosive, (P.), B., 388.

Davis, T. W. See Hill, A. E.

Davis, W. C. See British Cyanides Co., Ltd.

Davis, W. N. See Halloran, R. A.

Davison, W. C., viscometric determination of amylase, A., 323.

Davison, W. C. See also Maslow, H. L.

Dawe, C. N. See Woodside, W. P.

Dawes, C. L., Boughton, W. A., and New England Mica Co., insulating bodies and method of producing them, (P.), B., 417.

Dawson, (Miz) B. B. See Adeney, W. E.

Dawson, C. A., relative merits of mono-, di-, and tri-calcium phosphates as soil fertilisers, B., 892.

Dawson, E. H., Platt, B. S., and Cohen, J. B., hydrolysis of asymmetric esters by lipase, A., 565.

Dawson, H. M., and Carter, J. S., ionisation of the strong electrolytes, A., 244.

acid and salt effects in catalysed reactions, I., A., 1108.

Dawson, J. A., composition of logberry juice, B., 846.

Dawson, L. R., precise automatic pressure regulator, A., 41.

Dawson, T. H., blending of compounding ingredients [for rubber], B., 374.

particle size effects in rubbers subjected to repeated stress, B., 956.

Dawson, W. H. See British Alizarine Co., Ltd.

Day, A. A. See Kendall, A. J.

Day, C., water distilling apparatus utilising exhaust gases, (P.), B., 78.

Day, E. L., composition and method of producing fuel, (P.), B., 732.

Day, H. A. See Pucher, G. W.

Day, R. B., treating [cracking] petroleum oils, (P.), B., 231.

Day, W. E., carburation by solid cements, B., 881.

Day, W. E., *jinn*, and International Motor Co., high-lead bronze alloy and method of manufacture, (P.), B., 590.

Daynes, H. A., and Cambridge Instrument Co., Ltd., measuring the amount of gas dissolved in a liquid, (P.), B., 968.

De, M. K. See Guha, P. C.

De, P. K. See Sircar, A. C.

De, R., uranium-X: extraction and determination, A., 220, 331*.

phenomenon of valency, A., 887.

De, S. C., pyrazolone series: action of thiocemicarbazide and semicarbazide on ketone esters, I., A., 738.

Dean, E. W. See Neusbaum, C. A.

Dean, H. See Stoneware, Ltd.

Dean, J., dyeing machinery, (P.), B., 11*.

Dean, P. M. See Moureu, C.

Dean, R. S., Hudson, W. E., and Fogler, M. F., system lead-antimony, II., B., 93.

Dearborn, R. J. and Texas Co., manufacture of aluminium chloride, (P.), B., 950.

Dearden, W. H., and Benedict, C., magnetic changes in iron and steel below 400°, A., 506, 1082*.

Dearnsley, W. L. M., chemistry of bread; New Zealand wheat flours and fermentation, B., 73.

De Beat, (Mme) W. C., dithionic acid and its salts, A., 466.

De Bajaj, M. F., still, (P.), B., 80.

De Barros, D., nuclear numbers, A., 7.

De Bats, J. H. L., and De Bats Metals Co., alloy, (P.), B., 283.

De Bats Metals Co. See De Bats, J. H. L.

Debauche, H., transformation of lignites, coals, and other carbonaceous matter into fuels of high calorific power, including smokeless fuels, (P.), B., 777.

De Belsunce, G., rancidity and yellowing of soaps, B., 200.

perfumed Marseilles soaps, B., 372.

alcohol, acetic acid, and other by-products from arachis nut [pea-nut] shells, B., 448.

De Béthune, G., apparatus [tuyère] for the introduction into furnaces and blast furnaces of materials or residues, (P.), B., 711*.

rotary furnaces for molten material, (P.), B., 857.

De Béthune, G., Vahrenkampf, R., and Société Nationale d'Ind. Chim. en Belgique, S. A., producing alkali sulphides, (P.), B., 583.

De Blicquet, J. See Callebaut, C.

De Boer, J. H., delicate colour reactions for zirconium, hafnium, and fluorine by means of hydroxyanthraquinones, A., 40.

separation of hafnium and zirconium by fractional precipitation as phosphates from oxalic acid solution, A., 373.

De Boer, J. H., and Basart, J., rapid volumetric determination of fluoride in simple, complex, and insoluble fluorides, A., 590.

De Boer, J. H., and Fast, J. D., preparation of pure metals of the titanium group by thermal decomposition of their iodides. I. Zirconium, A., 699.

De Boer, J. H. See also Arkel, A. E. van.

Debray, M. See Grigaut, A.

De Brey, J. H. C., and Bataafsche Petroleum Maatsch., separating the phases of emulsions, particularly of petroleum, by means of an electric current, (P.), B., 525.

De Brisson de Laroche, C. See Meunier, G.

De Broglie, M., and Dauvillier, A., spectrographic studies of the Compton effect, A., 217.

De Bruin, T. L., spark spectrum of potassium, A., 874.

yellowish-green discharge in potassium vapour, A., 1070.

spectrum of ionised potassium, I., A., 1070.

Debye, P., and Hardmeier, W., anomalous scattering of α -particles, A., 450.

De Carli, F., reactions in the solid state between lead dioxide and other oxides, A., 811.

De Carli, F. See also Mazzetti, C.

De Cew, J. A., process of hydration in paper-making, using friction, (P.), B., 483.

sizing cellulose fibres [paper pulp], (P.), B., 661, 739.

De Cew, J. A., and Process Engineers, Inc., sizing cellulose fibres; paper-sizing process, (P.), B., 49.

preventing froth on paper machines, (P.), B., 356.

hydrating cellulose fibres [for paper-making], (P.), B., 533.

Déchêne, R., spectra of exploding wires, A., 446.

De Christian, V. G. See Hadnagy, Z.

Decker, H., magnetic susceptibility of aqueous solutions of salts of the rare earths, A., 567.

Decker, L. B., gas and heat recovery from [wood pulp] digester blow-off exhaust vapours, (P.), B., 533.

Decker, R. T. See Englis, D. T.

Deekert, R., technology of the manufacture of water-glass [sodium silicate], B., 786.

Décolland, R., unfused aluminous cement, (P.), B., 193.

De Coninck, M., combustion of solid fuel, (P.), B., 431*.

De Conno, E., Goffredi, E., and Dragoni, C., stabilising agents for oils, B., 135.

De Coster, A., action of organo-magnesium compounds on nitriles; benzoyl cyanide, A., 1027.

De Coulon, A. See Viles, P.

DeCourt, J. See Looper, M.

De Cugnac, A. See Colin, H.

De Dampierre, M. A. H., conversion of heavy [mineral] oils into lighter products, (P.), B., 147.

De Dene, L., and Becker, T., influence of neutral salt on the precipitation of metal sulphides, A., 588.

Deek, J., and Terechov, P., sucrose as an acid; [new theory of the formation of molasses], B., 927.

DeDow, C., and Smith, D. T., determination of moisture in meat extract, B., 846.

De Dominicis, A., and La Rotonda, L., coagulation [of milk] by rennin, I., Action of heat, A., 1174.

camphor researches at Naples, B., 645.

De Donder, T., application of relativity to atomic and molecular systems, A., 657.

De Eds, C. E. See Van Stone, N. E.

De Eds, F. See Hanzlik, P. J.

De El, H., and Deel, (Mme) H., effect of the hydrogen-ion concentration of the soil on the formation and composition of essential oil of wood sage, B., 850.

Deel, (Mme) H. See Deel, H.

Deeler, R. B., zinc-cadmium alloys, B., 328*.

Defancamberge, J., and Société Française des Crins Artificiels, conservation of pellicles of hydrate or of hydrated ethers of cellulose, (P.), B., 356*.

Defay, R., absolute colorimetry, A., 1115.

correction of colorimetric determinations, A., 1115.

De Fezi, R., photosyntheses. I. $\alpha\beta\beta$ -Triphenyl- β -hydroxypropionic acid, A., 289.

syntheses in organic chemistry by radiant energy. I. Photosynthesis of $\alpha\beta\beta$ -triphenyl-lactic acid, A., 335.

determination of sulphur in liquid fuels, B., 971.

silica-lime bricks, B., 980.

De Fersen, E. See Deriveau, P.

De Florez, L., and Texas Co., process of making motor fuel, (P.), B., 120*.

De Foe, O. K., longitudinal asymmetry in the direction of ejection of photoelectrons by X-rays, A., 1187.

De Forerand, R., action of thallium on dissolved alcohols and acids, and on excess water and ethyl alcohol, A., 476.

thermochromy of some ethoxides and thallous salts, A., 685.

Defossez, L. See Chomé, P.

De Gaalon, F. See Marmier, P.

De Ganahl, C., and Koch, F. C., fractional distillation of hydrocarbons, (P.), B., 397.

Degenhardt, W. R., apparatus for discharging the solid products from retorts and the like, (P.), B., 479*.

De Giacomi, E., contributions of the individual principles of *Digitalis* to the action of the complete drug, A., 1173.

De Goloubinoff. See Travers.

De Graaff, A., Ley, J., jun., and General Electric Co., Ltd., manufacture of incandescence lamps, (P.), B., 19*.

De Graaff, H., $\beta\beta$ -dimethylpentane and γ -methylhexane, A., 495.

De Graer, J. H., producing hydrogen from water-gas, (P.), B., 479*.

De Groot, W. See Dorgelo, H. B.

De Groot, M., Adams, W. C., and Barnickel & Co., W. S., treating petroleum emulsions, (P.), B., 973.

De Groot, M., and Barnickel & Co., W. S., process for treating petroleum emulsions, (P.), B., 701.

process for breaking water-in-oil [petroleum] emulsions, (P.), B., 908.

De Groot, M., Keiser, E. H., and Barnickel & Co., W. S., treating petroleum emulsions, (P.), B., 973.

De Gruyter, C. J., electromotive behaviour of aluminium, A., 30.

De Guigou, C., manufacture of ammonia, (P.), B., 155.

treatment of barium sulphide, (P.), B., 156.

treatment of molasses and sugary juices, with a view to recovery of the sugar, (P.), B., 561, 764*.

purification of barium silicates, (P.), B., 788.

De Haas, W. J., Sizoo, G. J., and Onnes, H. K., magnetic disturbance of the superconductivity of mercury. I. and II., A., 667.

De Haas, W. J. See also Becquerel, J., Onnes, H. K., and Sizoo, G. J.

De Haen, E., A.-G., preparation of concentrated solutions of hydrogen peroxide, (P.), B., 823.

De Haen, E., A.-G. See also Meyerhofer, A. F.

De Hédouville, G., and Pipereant, P., manufacture of crystallised zinc sulphide, (P.), B., 13.

De Hernandez, L., distillation of oil-bearing materials, (P.), B., 351.

Dehls, J. C. See Ebert, J.

Dehn, W. M., complex salts of quinoline, metallic chlorides, water, and hydrogen chloride, A., 304.

complex salts of quinoline, mercuric halides, water, and hydrohalogen acids, A., 304.

manufacturing adhesive blends of sodium nitrate and ammonium nitrate for explosive purposes, (P.), B., 221.

Dohn, W. M., and Cope, H., complex salts of quinoline, mercuric halides, and alkyl halides, and some isomerites, A., 1257.

Dehnicke, J., concentration of the alcohol content of alcohol-water vapour by separation of the aqueous distillate [phlegms], B., 508.

Dehorne, A., cytological evidence of presence of cholesterol in the normal eye, A., 316.

Deilmayr Chemische Fabrik Aktien-Gesellschaft, I., and Schwarz, H., preparation of a highly active charcoal, (P.), B., 779.

Deines, O. von, [hypochlorous acid and the alkali perchlorides], A., 133.

Déjardin, G., excitation of secondary spectrum of neon by electronic impact, A., 329.

Déjardin, G. See also Bloch, L.

De Jong, W. F., structure of nickelin and pyrrhotin, A., 460.

structure of breithauptite, A., 460.

structure of sperrylite, A., 503.

mineral substance in bones, A., 781.

crystal structure of tiemannite and coloradoite, A., 996.

De Jongh, S. E. See Laqueur, E., and Wolff, L. K.

De Kadit, P. J., distillation of Mexican crude oil emulsions and simultaneous preparation of asphalt emulsions, B., 620.

De Koyser, M., treating sulphide ores and concentrates, (P.), B., 163.

De Klerk, A., and Goldschmidt, V., calcite in regular growth on ankerite and chalybite, A., 263.

De Kolosovski, N., kinetic theory of the specific heat of solutions, A., 236. calculation of colligative constants, A., 791.

association of liquids and a relation between the capillary constant and the heat of vaporisation, A., 1008.

colligative constant and Poisson's capillary constant, A., 1199.

De Kruiff, H. W., and Voerman, G. L., Feder number in relation to the examination of meat, B., 643.

Delaby, R., transformation of alkylvinylcarbinols into β -alkylallyl alcohols, A., 47.

catalytic oxidation of alkylvinylcarbinols to alkyl vinyl ketones in presence of palladium-black, A., 272.

Delaby, R., and Janot, M. M., cyclohexylglycerol, A., 165.

Delaby, R., and Morel, G., methylalkylglycerols, A., 383*.

action of formic acid on methylalkylglycerols, A., 498.

De Lange, M. P., displacement of atoms and groups in the benzene nucleus, A., 278.

De La Peña, P. See Strecker, W.

Delaplace, R., casium cosinate, A., 949.

De Laporte, A. J. A., electrolytes for lead accumulators, (P.), B., 446.

De Laporte, A. V., [coagulation in water purification], B., 468.

De Laporte, A. V., and Manuel, F. R., colloid chemistry in [water] filtration, B., 723.

De Laporte, A. V. See also Dallyn, F. A.

De La Roisière, J. F. P., [liquid] fuel, (P.), B., 6.

De Laroche, C. E. M. J. de B., production of solutions or suspensions of metal sulphides [plant sprays], (P.), B., 764.

De Larouette, M., ionometric measurement of X-rays incident on unit surface and of X-rays absorbed by unit volume, A., 553.

De Lászlo, H. G., absorption spectra and activated states of naphthalene and its methyl derivatives, A., 223.

absorption spectra of some naphthalene derivatives in vapour and solution, A., 775.

De Latte, J. G., and Hardy, H., cold processes for drawing and rolling metals, (P.), B., 96.

Delaney, P., glucosides of indigenous orchids, A., 210*.

Delaney, P. See also Charaux, C.

De Laval Chadburn Co., Ltd., and Bamford, A. C., [device for cleaning] centrifugal separators, (P.), B., 521*.

De Laval Chadburn Co., Ltd., and Chadburn, W. R., centrifugal liquid purifiers, (P.), B., 649.

De Laval Separator Co. See Hall, S. H., Moss, S. W., and Petty, E.

Delaville, M., and Carlier, P., determination of small quantities of potassium, A., 491.

micro-determination of potassium in pure solutions and in biological media, A., 1068.

Delaville, M. See also Blum, L.

Delbanco, A. See Brändström, J. A.

Delbart, G., corrosion of cast irons in sulphuric acid of varying concentration, B., 56.

brittleness of cold-worked steel, B., 194.

magnetic permeability of cold-drawn steels, B., 1016.

Del Diestro, G., cholesterol in cerebrospinal fluid, A., 636.

Delépine, M., supposed isomeride of methyleneaminocetonitrile; methylene-bisimidodiacetonitrile, A., 943, 1236*.

Delépine, M., and Adida, A., action of picric acid on *d*-*a*-pinene and on *l*- β -pinene (pinopinene), A., 841.

Delépine, M., and Grandperrin, M., constitution of the (so-called) potassium salt of bornyl picrate, A., 842.

Delépine, M., and Longuet, A., apiole of *Anethum* and its propenyl isomeride, A., 1036.

Del Fresno, C., potentiometric indications in the action of halogens on ferrocyanides, A., 138*.

relationship between atomic volume and atomic number, A., 450, 555, 1195.

Delhougne, F., gastric secretion. I. Hydrochloric acid and chlorine concentration of pure gastric juice. II. Effect of strenuous work on gastric secretion, A., 1168.

De Liede, W. See Smits, A.

Dellacher, J. See Kramann, R.

Dellepiane, M., determination of fat in dried milk, B., 563.

De Loisy, E., theory of the electric arc furnace according to recent work, B., 635.

rate of carbon elimination in the Martin [open-hearth steel] furnace, B., 880.

De Loisy, M. C. J. E. See Damiens, A. A. L. J.

De Lorimier, A. A. See Clark, G. W.

Del Regno, W., behaviour of selenium exposed to the action of mesothorium radiations, A., 666.

Del Rosario, C., effect of a hydrogen atmosphere on the velocity distribution among thermionic electrons, A., 1189.

Deley, J. D., and Atmospheric Nitrogen Corporation, gas purification [removal of carbon monoxide from ammonia-synthesis gases] by ammoniacal cuprous solutions, (P.), B., 823*.

Delzeit, J. P., and Leigh Coal and Navigation Co., [fuel] briquette and process, (P.), B., 860.

De Mallemann, R., calculation of Verdet's constant in the molecular theory of magnetic rotatory polarisation, A., 111.

dispersion of the electric birefringence of camphor, A., 778.

magnetic rotatory and electric double refraction dispersion, A., 887.

Demann, W., hydrogenating tar oils, (P.), B., 973.

Demann, W., and Packard Motor Car Co., aluminium solder, (P.), B., 590.

Demeyer, P. A. J. H., alloy [for soldering aluminium], (P.), B., 245.

Demolom, A., adsorption and mobilisation of the potassium ion in colloidal clays, A., 673.

De Molte-Huitfeldt, J. See Krantz, N.

De Monthy, A. J., and De Monthy, H., paper pulp from seaweed, (P.), B., 315.

De Monthy, H. See Berthélémy, P., and De Monthy, A. J.

De Montmollin, G. See Society of Chemical Industry in Basle.

Dempster, A. J., free path of protons in helium, A., 4, 480.

Dempster, R. and J., Ltd., and Holton, A. L., combination apparatus for the slaking and mixing of lime, particularly for use in sulphate of ammonia plant, (P.), B., 52.

Dempster, R., & Sons, Ltd. See Barnes, A., Illingworth, S. R., and Toogood, H. J.

Dennus, H. See Straus, F.

Demuth, F., phosphate metabolism. II, A., 322.

De Myttenaere, F., arsenobenzenes, their composition and toxicity, the nature of the substitution, the value of the D.M. index, B., 385.

value of the D.M. index from the point of view of the toxicity of the arsenobenzenes, B., 645.

De Nagy, D., photomechanical printing surface and process, (P.), B., 722*.

Denecke, W., system iron-silicon-chromium, A., 909.

Denecke, W. See also Meierding, T.

De Neyman, C., [pulverulent cellulose and chlorinated hydrocellulose], B., 435.

Dengler, O. See Boehringer Sohn, C. H.

Denham, H. G., hydrogen sulphide generator, A., 815.

Denham, H. J., Watts, G., and Simon Ltd., H., ascertaining the moisture content of cereals, (P.), B., 766*.

Denham, W. S. See British Silk Research Association.

Denizs, G., qualitative [micro-]analysis; micro-crystallloscopy, A., 439.

action of hydrobromic acid and alkali bromides, in an acetic acid medium, on cupric bromide, A., 922.

action of concentrated hydrobromic and hydriodic acids on the cobalt ion; new reaction of nickel, A., 930.

utilisation of catalysis in microcrystalline analysis [for the detection of hydrocyanic acid], A., 1222.

Denina, E., analogies and differences in behaviour of the various forms of energy in reversible and irreversible transformations, A., 29.

generalised expression of the phase rule and its particular application to o-motic, thermo-electric, and electro-csmotic phenomena, A., 1102.

Fry's new theory for the lead accumulator, B., 1019.

Denis, J., treating waste liquors containing cyanogen compounds, (P.), B., 538.

Denis, P., detection and determination of mercury by means of aluminium, A., 703.

Denis, W., and Corley, R. C., effect of excessive ingestion of calcium on calcium content of tissues with and without application of ultra-violet light, A., 431.

Denis, W., and Leche, S., distribution of injected sulphates in tissues, A., 87.

determination of total sulphates in tissues, A., 212.

Denis, W. See also Corley, R. C.

Deniszcukowna, (Mme.). See Glixelli, S.

De Nitto, J., rigor mortis and post mortem acid formation in different organs under the action of poisons, A., 973.

Dennett, H. G., and Turner, E. E., orientation effects in the diphenyl series. I., A., 391.

Dennis, L. M., and Hance, F. E., germanium. XVI. Germanium tetramethyl; analysis by combustion of a liquid containing carbon and hydrogen, A., 1028.

Dennis, L. M., Ormrod, W. R., and Talern, D. L., germanium. XV. Germano-chloroform, A., 924.

Dennison, D. M., analysis of certain molecular spectra, A., 222.

molecular structure and infra-red spectrum of methane, A., 659.

absorption spectrum of carbon dioxide and the structure of the molecule, A., 882.

rotation of molecules, A., 994.

molecular structure of methane, A., 1083.

Dennier, W. S. See McKenzie, A.

Densch, determination of manurial requirements of soils by laboratory methods, B., 378.

Dent, (Miss) B. M. See Lennard-Jones, J. E.

De Onq, E. R., potassium xanthate as a soil fumigant, B., 207.

De Onq, E. R. See also Gray, G. P.

De Paolini, I. See Ponzi, G.

Deppé Söhne, A., and Zeitschel, F. O., isolating alcohols or phenols from mixtures, (P.), B., 651.

Deppermann, C. E., Stark effect, A., 653.

De Procouine-Gorsky, S., and Pozniakov, N., rendering gelatin insoluble and producing images in relief, (P.), B., 220, 351*, 1030*.

Derbigay, I. A. See Nichols, M. L.

Derby, I. H., Edwards, C. B., and Reilly, P. C., process of modifying ignition temperature etc. of carbonaceous materials, (P.), B., 476.

De Rey-Pallade, J., existence of α - and β -philothione, A., 969.

Derrick, C. G., Leaming, T. H., Ralph, W. M., and National Aniline and Chemical Co., production of *m*-amino-*p*-methyl ether, (P.), B., 185.

Deriveau, P., De Fersen, E., Fleschi, F., Lancesseur, E., Potel, A., and Watal, P., production of organic acids from soda-cellulose waste liquor, (P.), B., 49.

Dernby, K. G., nature of diphtheria toxin, A., 759.

De Ros, D., and Barton, F., hardening and preserving natural and artificial stones, (P.), B., 1015.

Derribigay, E., vermin-killer, (P.), B., 998.

Desai, G. D. See Sharma, H. S.

De St. André Meynardie, See Meynardie.

Desalbres, L. See Dupont, G.

Desarigny, R., alcohol [motor] fuel, (P.), B., 524.

Desborough, A. P. H., Thaysen, A. C., and Green, B. M., fermentation processes for *n*-butyl alcohol and acetone [from artichokes], (P.), B., 1026.

Descomps, R. See Cotton, A.

Desch, C. H., chemistry of solids, A., 310.

Deschamps, J. J., method and means for stimulating distillation, (P.), B., 38.

Deschiens, M., acroplane dopes, B., 248.

utilisation of seaweed and marine plants, B., 630.

Descombes, F. A. See Teval, H. L. P.

Desrez, A., Bierry, H., and Lescœur, L., fixation of hydrogen sulphide in the blood, A., 750.

Desrez, A., Lescœur, L., and Manjean, (Mme.) S., influence of a current of inert gas on the decomposition of sulphuretted solutions; application to mineral waters, A., 1113.

Desrez, A., and Meunier, J., inorganic elements associated with oxyhaemoglobin in horse blood, A., 191.

detection and determination of strontium in sea-water, A., 1222.

Desrez, A., Moog, R., and Gabriel, (Mme.) L., variation of the amount of nitrogenous material, particularly urea, in the saliva, A., 195.

Desta, L. J., Sherrill, R. E., and Harrison, L. M., fluorimetry. II. Relation between fluorescence and hydrogen-ion concentration, A., 776.

De Sigmond, A. A. J., theory of the origin of alkali soils, B., 762.

De Silva, P. A., cast or moulded articles [of titanium containing slag], (P.), B., 543.

De Smedt, J., crystal structure of solid carbon disulphide, A., 1195.
 De Sperati, M., and Argentographica, Ltd., film for photocollographic printing plates, (P.), B., 960.
 D'Espine, J., retardation of β -particles, A., 332.
 De Spirlet, X., combustion, reduction, or treatment of solid material or of pulverised minerals, (P.), B., 473*.
 Dessart, A., theory of concentrated solutions, III. Physical constants of mixtures of *m*-nitrotoluene and *m*-toluidine with some hydrocarbons, A., 404.
 Desvergne, L., physical properties of the nitronaphthalenes, A., 605.
 pottery from the ancient "oppidum" of Vindallium (Vaucluse), B., 323.
 Dethloff, H., apparatus for graphical registration of oxygen-consumption and carbon dioxide production, A., 1067.
 De Toni, G. M., colorimetric determination of cholesterol and lecithin in blood, A., 1283.
 Deutner, C. G., potassium ferrocyanide and ferro ferrocyanide as sources of iron for plants, B., 458.
 Deuel, H. J., Waddell, S. S., and Mandel, J. A., physiological behaviour of glucosan, A., 973.
 Deuel, H. J., *jun.* See Plummer, N. H.
 Deuss, J. J. B. See Steinmann, A.
 Deussen, E., calcium hypophosphate as a substitute for Bettendorf's reagent in qualitative tests for arsenic, A., 814.
 detection and determination of tin in toxicological cases, A., 872.
 mono- and sesqui-terpenes; [caryophyllene], A., 1252.
 Deuticke, H. J., chemistry of rigor, A., 318.
 Deuticke, H. J. See also Embden, G.
 Deutsch, D., solubility of protein in fat solvents, A., 672.
 Deutsch, D. See also Hollo, J.
 Deutsch, H. See Herrmann, W. O.
 Deutsch, W. See Rona, P.
 Deutsch-Englische Quarzschmelze G.m.b.H., and Hirschberg, Z. von, melting of quartz glass and other highly refractory materials, (P.), B., 824.
 Deutsche Erdöl A.-G., and Schick, F., purification of hydrocarbon oils, (P.), B., 861.
 Deutsche Gasglühlicht-Auer-Gesellschaft, production of easily filtered, hydrated titanic acid, (P.), B., 12.
 silvering glass or other surfaces of non-conducting material, (P.), B., 55.
 separation of didymium from cerium, (P.), B., 237.
 weighting silk, (P.), B., 317.
 production of fireproof and acid-proof material, (P.), B., 667.
 imparting to desiccants a large superficial area, (P.), B., 856.
 manufacture of refractory substances from high-grade oxide of zirconium, (P.), B., 947.
 production of permanent pigments, (P.), B., 955.
 Deutsche Gasglühlicht-Auer-Gesellschaft, and Merzbacher, S., preparation of acetylisalicylic acid, (P.), B., 335.
 Deutsche Gold- & Silber-Scheideanstalt vorm. Roessler, and Albert, A., production of derivatives of organic arsenic-compounds, (P.), B., 462.
 production of unsymmetrical arsobenzenone compounds, (P.), B., 462.
 Deutsche Gold- & Silber-Scheideanstalt vorm. Roessler, and Liebknecht, O., manufacture of hydrocyanic acid, (P.), B., 51.
 Deutsche Kunsthorn-Gesellschaft m.b.H., and Schlinck, J., preparation of plastic horny substances from albumin or albuminous materials, (P.), B., 840.
 Deutsche Linoleum-Werke Hansa. See Slansky, P.
 Deutsche Luftfilter-Bauges. m.b.H., removal of dust from the gases produced in low-temperature carbonisation, (P.), B., 573.
 Deutsche Ton- & Steinzeug-Werke A.-G., preparation of porous bodies of magnesia, (P.), B., 55.
 De Vains, A. R., process of rendering chlorides of ketones [in cellulose pulp] soluble by treating with sulphites made from waste liquors, (P.), B., 739*.
 Devaux, M., retort resembling a converter, for distilling material containing hydrocarbons, (P.), B., 38.
 De Vecchis, I., and Home and Colonial Investments, extracting sugar from beets, (P.), B., 25*.
 Dever, W. C., and Kelvinton Corporation, testing liquid sulphur dioxide; [determination of moisture content], (P.), B., 875.
 Devers, P. K. See British Thomson-Houston Co., Ltd.
 De Verter, P. L. See Neusbaum, C. A.
 De Visser, W., calender and creep-effect in unvulcanised rubber, B., 63.
 De Vries, O., plasticity determinations on crude rubber. IV. Difference between smoked sheet and pale crepe, B., 204.
 preservation of [rubber] latex with ammonia combined with other means, B., 681.
 specific gravity of *Hevea latex*, V., B., 681.
 De Vries, O., and Spoon, W., matured rubber; influence of different factors in preparation; loss in weight, inner properties; large-scale preparation of "slab" rubber, B., 203.
 De Vries, O., Spoon, W., and Riebl, R., formic acid as a coagulant for *Hevea latex*, B., 203.
 Dewael, A., ethers derived from propylene chlorohydrin, A., 383.
 ethyl β -hydroxybutyrate, A., 384.
 β -methyl derivative of *a*-ethoxybutan- δ -ol, A., 1225.
 De Waal, P. W. H. J. V., oxidation of linseed oil, (P.), B., 415.
 De Waale, A., plasticity, B., 143.
 apparent paradox of plasticity, B., 391.
 De Waale, A. See also Bromley, H. A.
 De Wolff, C. J., relation between configuration and rotation direction of sugars, A., 940.
 sucrose formation in potatoes during drying. I, A., 1183.
 Dexter, W. A. See Mirlees Watson Co., Ltd.
 Dexter, W. J. See Dunlop Rubber Co., Ltd.
 Dey, B. B., and Seshadri, T. R., quinolinobromopyrones and their conversion into quinolinofurans, A., 1153.
 Dey, S. C. See Guha, P. C.
 Dhar, N. R., influence of adsorption on the colour of sols and of precipitates, A., 24.
 viscosity of colloids in presence of electrolytes, A., 123.
 formation of deposits in gout and other diseases and the cause of swelling in beri-beri, A., 426.
 old age and death from a chemical point of view, A., 533.
 dissociation constants of weak acids and bases from solubility measurements, A., 796.

Dhar, N. R., influence of temperature on metabolism and the problem of acclimatisation, A., 860.
 compounds of solute and solvent from partition coefficients, A., 898.
 fluorescence, phosphorescence, chemiluminescence, and the activation of molecules, A., 992.
 Dhar, N. R., and Ghosh, S., adsorption. XIII. Schultze-Hardy law and adsorption, A., 673.
 peptisation and formation of complex ions, A., 679.
 Dhar, N. R., and Mukerji, B. K., Einstein's law of photochemical equivalence, A., 581*.
 mechanism of photochemical reactions, A., 583*.
 Dhar, N. R. See also Chakravarti, D. N., Chatterji, A. C., Ghosh, S., Mehrotra, M. R., Mukerji, B. K., and Palit, C. C.
 Dhé, P., melting furnace of the tilting type [for fusing basalt], (P.), B., 129.
 Dhé, C., electrodialysis in biochemistry, A., 762, 1067.
 Dhé, C., and Bois, E., comparative study of the fluorescence of natural and artificial porphyrins, A., 885.
 D'Huart, G. See Hackspill, L.
 Diamant, A.-G., production of tartaric acid from saccharic acid, (P.), B., 28.
 preparation of tartaric acid, (P.), B., 853.
 Diamant, E. See Erben, F. X.
 Diamant, J. See Jirsa, F.
 Diaz, A. V., gasification of [heavy] liquid fuels, for use in internal-combustion engines, (P.), B., 654.
 Diaz, F. O. See Strecker, W.
 Diaz de Rada, F., and Gaspar y Arnal, T., application of the Gaspar reagent to the recognition and separation of the alkali metals, A., 702.
 Dibbern, H. See Feist, F.
 Di Capua, C., complex molybdates with organic bases, A., 304.
 Dice, M. E., sand filtration, B., 966.
 Dickens, C., product [insecticide] resulting from a reaction between barium and a metal of the sulphur group, (P.), B., 139*.
 Dickens, F. See Davies, D. T.
 Dickens, P. See Dichterle, H.
 Dickenson, J. H. S., distribution of silicates in steel ingots, B., 491, 883*.
 Dickerson, W. H., and Industrial Waste Products Corporation, concentrating and drying fruit juices, (P.), B., 106.
 Dicker, M., coking peat in the presence of tar oil of b. p. above 350°, (P.), B., 862.
 Dichterle, E. See Ohle, H.
 Dickie, H. A. See Andrew, J. H.
 Dickie, W. A. See British Celanese, Ltd.
 Dickinson, R., condensation of benzyl methyl ketone with salicylaldehyde, A., 1144.
 Dickinson, R. G., and Sherrill, M. S., formation of ozone by optically excited mercury vapour, A., 485.
 Dickinson, R. G. See also Kirkpatrick, L. M.
 Dickinson, T., Brimley, F. J., and Nigerian Products, Ltd., extraction of oil from palm fruit, (P.), B., 20.
 Dickson, E. C. S., and Binks, W., crystalline structure of anhydrite, A., 781.
 Dickson, J. B., and Goodrich Co., B. F., treating rubber composition, (P.), B., 101.
 Diderichs, See Benrath, A.
 Diderichs, W. J., and Hayes, A., process for treating iron, (P.), B., 368.
 Differnbauch, K. See Schwarz, R.
 Diehl, A. N., data relating to basic open-hearth steel practice, B., 670.
 Diehl, C. See Merck, E.
 Dieke, G. H., and Heel, A. C. S. ran, difference of the fluorescence and absorption spectra of uranyl salts, A., 454.
 Dieke, G. H. See also Hopfield, J. J.
 Diekmann, H. See Tammann, G.
 Diekmann, J. J., drying small quantities of alcohol, A., 594.
 Diels, O., carbon suboxide, A., 1015.
 Diem, A. See Eckart, H.
 Diem, W. See Sauer, E.
 Dieniske, J. W. See Booy, J.
 Dienghorst, E. M. See Evans, W. V.
 Dierksen, J. See Badische Anilin- & Soda-Fabrik, and Wöhler, L.
 Dietel, F. G., relation of blood- to cerebrospinal fluid-sugar and the diagnostic value of sugar determinations in cerebrospinal fluid, A., 1052.
 Dietrich, A., temperature variation of dielectric constant in quartz, fluorspar, and gypsum, A., 1193.
 Dietrich, E. O., and Gray, H., effect of accelerated ageing upon some physical properties of hard rubber compounds [vulcanites], B., 503.
 Dietrich, W. von. See Chemische Fabrik Coswig-Anhalt G.m.b.H.
 Dietterle, E. A., oil-treating [cracking] apparatus, (P.), B., 814.
 Dietterle, H., oil-containing seeds of *Datura alba*, Nees, B., 372.
 Dietterle, H., and Dickens, P., oxidation of codeine with mercuric acetate, A., 745.
 Dietterle, H., and Stegemann, W., colouring matters of sandalwood; [constitution of santalin], A., 618.
 Dietrich, K. R. See Sablitschka, T.
 Dietrich, M. A. See Holmes, H. N.
 Dietrich, W. See Elektro-Osmose A.-G. (Graf Schwerin Ges.).
 Dietz, F. L., motor fuel oil, (P.), B., 524.
 Dietzel, A. See Schimminer, E.
 Dietzel, R., and Krug, R., optical studies on lactic acid and its anhydride, A., 338*.
 Dietzsch, W. F., reclaiming tar and light oil [from aqueous emulsions], (P.), B., 702.
 Diaz, S. See Maurer, E.
 Di-Foutsin, calcium content of human serum, A., 634.
 Dijatschkoewski, S. J. See Dumanski, A.
 Dijk, W. J. D. ran, Becquerel effect on copper oxide electrodes, A., 585*.
 Dik, H. W. J., spectral observations under special conditions [of lithium], A., 873.
 Dill, D. B., and Clark, P. B., formaldehyde in marine products, B., 330.
 can corrosion and blackening in certain marine products, B., 688.
 Dilling, W. J., *Chlorocodon Whitei*; its constituents and their pharmacological actions, A., 440.
 Dilthey, P. See Fischer, F.
 Dilthey, W., and Berres, C., pyridium compounds. XVI. Triphenylpyridium salts containing amino-groups, A., 177.
 Dilthey, W., Berres, C., Höllerhoff, E., and Wübken, H., heteropolar carbon compounds. IV. *spiro*Dibenzoypyrans, A., 1264.

Dilthey, W., and Berres, G. [with Lachs, A., and Schier, P.], heteropolar carbon compounds. II. Halochromy of acylated aminochalkones and related compounds, A., 727.

Dilthey, W., Fröde, G., and Koenen, H., pyrylium compounds. XVII. Arylated pyridines. VIII. o-Violones, A., 1254.

Dilthey, W., and Wizinger, R., piperidino as reagent for quinones and dyes, A., 1163.

Dilworth, H. M. See Boswell, M. C.

Dimakov, S. J. See Petrov, G. S.

Di Mase, G. See Berlingozzi, S.

Dimitrov, D. See Tröger, J.

Dimmig, H. See Van Gundy, M. C.

Dimroth, O., mercuration of nitrobenzene and substitution in the benzene nucleus, A., 312.

Dimroth, O. [with Schweizer, R., Rucht, R., Sagstetter, K., Hetzor, J., Bernzott, H., Bamberger, C., and Röbmann, O.], boroacetic anhydride as a reagent, II., A., 297.

Dimroth, O., Eber, H., and Wehr, K., *p*-benzoquinone dichloride, A., 206.

Dimroth, O., and Ruck, F., constitution of naphthalazarin, A., 297.

Dingemanse, E., dialysis and adsorption of insulin, A., 98.

stability of insulin to heat and some of its chemical properties, A., 98.

Dingemanse, E., and Laqueur, E., adsorption of poisons on charcoal. III. Partition of poison between charcoal and stomach- or intestinal-wall, A., 541.

Dingemanse, E. See also Wibaut, J. P.

Dinsmore, R. P., and Zimmerman, A. O., effect of accelerators on cure [vulcanisation] and quality of various rubbers, B., 289.

Di Pol, L. See Paal, C.

Dirac, P. A. M., quantum mechanics and a preliminary investigation of the hydrogen atom, A., 451.

theory of quantum mechanics, A., 1078.

Dirksen, R. See Chem. Fabr. auf Aktien (vorm. E. Schering).

Dirschel, W. See Freudenberg, W.

Dische, Z., and László, D., glycolytic power of animal organs in carcinoma, A., 1169.

Dische, Z., and Popper, H., colorimetric micro-method for determining carbohydrate in organs and body-fluids, A., 1282.

Dischendorfer, O., abnormal oxime of dehydro-2:2'-dihydroxydi- α -naphthylmethane, A., 622.

determination of the empirical formula of naturally occurring substances of high mol. wt., A., 749.

Dischendorfer, O. [with Rendi, O.], α - and β -amyrin, A., 522.

Disselkamp, T., solubility in binary liquid mixtures, A., 1089.

Di Stefano, F., analysis of soapy solutions of phenols [disinfectants], B., 221.

Di Stefano, F. See also Marotta, D.

Distillerie de Ruyssbroek, manufacture of citrate-soluble phosphate, (P.), B., 893.

Distilleries des Deux-Sèvres (Société Anonyme), extraction of total sugar from apples and pears, (P.), B., 294.

pectin, (P.), B., 339.

dehydration of impure ethyl alcohol, (P.), B., 604.

manufacture of simple or mixed ethers of the fatty series, (P.), B., 768.

Ditchburn, R. W., quenching of resonance radiation and the breadth of absorption lines, A., 334.

Dimtar, R., production of rubber articles, (P.), B., 453.

impregnation of wood, (P.), B., 489.

latex viscometer, B., 682.

production of coloured latex resistant to vulcanisation, B., 797.

adsorptive powders for rubber goods and a new theory of "blooming," B., 1021.

Dittler, E., chemico-mineralogical studies on alumino-silicates, A., 816.

determination of chromium in chrome iron ore, B., 411.

Dittmer, A. F., scattering of electrons by ionised mercury vapour, A., 1074.

Dittmer, M., tall oil, a by-product of sulphate-cellulose manufacture, B., 414.

Ditto, M. W., and Chicago Trust Co., coke oven, (P.), B., 907.

Ditto, M. W., and Duncan, W. M., cooking coal, (P.), B., 779.

Ditz, H., and Neumann, B., constitution of bleaching powder, B., 537.

Divine, R. D., reclaiming and converting asphaltum with other materials from waste material [with production of lampblack], (P.), B., 232.

Diwald, J. See Friedrich, A.

Dixon, A. L. See Rodebush, W. H.

Dixon, H. B., and Greenwood, G., velocity of sound in mixtures of gases, A., 16.

Dixon, H. B., Harwood, J., and Higgins, W. F., explosive reactions in gaseous media; ignition-point of gases, A., 689.

Dixon, H. B., and Higgins, W. F., phosphorescent flame of carbon disulphide, A., 10.

Dixon, H. B. See also Campbell, C.

Dixon, J. L., and Pittsburgh Research Corporation, electrothermic refining of metals [steel], (P.), B., 329.

electric-arc furnace, (P.), B., 331.

Dixon, M., xanthine oxidase. VII. Specificity of the system, A., 977.

Dixon, M., and Kodama, K., purification of xanthine oxidase, A., 1175.

Doan, G. E., welding rod and process of welding [steel], (P.), B., 883.

Dobbelstein, O., devices for drying, roasting, or otherwise treating materials in bulk, (P.), B., 904.

Dobbelstein, O., and Hess, H., annular kilns [for drying and carbonising carbonaceous materials], (P.), B., 4, 6*.

Dobbenburgh, W. D. J. van. See Cohen, E.

Dobrow, M. A. See Carr, E. P.

Dobbs, A. C., means for transfer of heat, (P.), B., 81*.

Dobref, M., effect of injection of secretin-like plant extracts on the intermediary metabolism of carbohydrates, A., 98.

Dobrjanaki, A., analysis of mixtures of unsaturated hydrocarbon gases; determination of erythrene in gas mixtures, B., 394.

Dobrjanski, A., and Matuszovski, K., distillation of petroleum with gases, B., 1002.

Dobroserdov, D., comparison of various methods for the determination of perchlorates, A., 928.

Dobroserdov, D., and Erdmann, V., new method of calcination for the determination of chlorine in perchlorates, A., 927.

Dobrovolsky, P. J. See Smith, L. I.

Dobson, G. M. B., and Harrison, D. N., measurement of the amount of ozone in the earth's atmosphere, A., 140.

ozone in the earth's atmosphere and its relation to other geophysical conditions, A., 493.

ultra-violet photometry, A., 706.

Dohy, G., and Hibbard, R. P., activation of plant enzymes by ions, in relation to nutrition. I. Amylase of sugar beet poor in potash, A., 1182.

Dochmann, J., possibility of the existence of free electrons in solutions, A., 906.

Dockeray, G. C. See Fearon, W. R.

Dodd, H., Sprent, W. C., and United Alkali Co., Ltd., manufacture of quinizarin, (P.), B., 233.

manufacture of anthraquinone derivatives, (P.), B., 398.

manufacture of thioindigo derivatives, (P.), B., 577.

manufacture of chlorohydroxyanthraquinone, (P.), B., 869.

Dodds, E. C. See Davies, D. T.

Dodds, H. H., relative merits of mono-, di-, and tri-calcium phosphates as soil fertilisers, B., 892.

Dodge, B. F., feasibility of coke-oven hydrogen for synthetic ammonia, B., 741.

Dodonov, J., [bromination and iodination of organic compounds], A., 1224.

Dodonov, J., and Sochestvenskaja, E., occurrence of thiophene, benzene, and their next higher homologues, in tar oil from Russian bituminous schists, B., 1096.

Dodson, H. J. E., partial pressures of aqueous ethyl alcohol, A., 235.

Döhl, F., lead-zinc-antimony bearing metal, (P.), B., 331.

Döhl, H. See Guthler, A.

Doell, T. W. See Hanna, R. W.

Doeler, C., coloration of minerals by radiation, A., 367.

Döpke, O. See Roth, W. A.

Dörle, M., and Weiss, H. von, connexion between lipolytic power and cholesterol content of blood serum in hypertension, A., 426.

Dörle, M. See also Weiss, H. von.

Dörsam, H. See Moldenhauer, W.

Dogadkin, B., periodic precipitate formation of calcium phosphate salts, A., 1099.

Dognon, A., biological action of X-rays of different wave-lengths, A., 641.

Doherty, H. L., and Doherty Research Co., cracking of [hydrocarbon] oils, (P.), B., 941.

Doherty Research Co. See Allinson, J. J., Const, J. W., jun., Doherty, H. L., Griswold, R. G., and Walker, J. C.

Dohme, A. R. L., Cox, E. H., and Miller, E., preparation of acyl and alkyl derivatives of resorcinol, A., 833.

Dohrn, M. See Chem. Fabr. auf Aktien (vorm. E. Schering).

Doisy, E. A. See Ralls, J. O., and Weber, C. J.

Dokan, S., influence of electrolytes on glycogen sol, and the origin and inversion of the Hofmeister ion series, A., 23.

Dokan, S. See also Michaelis, L.

Dokter, A., composition for lubricating, dissolving, and preventing rust and the like, (P.), B., 67.

Dolbear, C. E., separating soluble sodium salts, (P.), B., 80.

separation of sodium chloride from mixed salts, (P.), B., 708.

Dolbear, S. H., and Selective Treatment Co., Ltd., process of [mechanically] treating asbestos ore, (P.), B., 709*.

Dolch, M., determination of apparent specific gravity of coke, B., 180.

determination of the degree of swelling of coking coals, B., 347.

gas yield of various solid fuels as a criterion of their combustibility and behaviour in the fire, B., 651.

degree of swelling of coking coals with particular reference to the geological and tectonic conditions of the coal seams, B., 729, 969.

Dolch, P., technology of calcium cyanamide, B., 272.

Dold, H., simple nephelometer and colorimeter, A., 378.

Dold, H., and Freudenberg, E., Salkowski's method of preparing protein-free anti-toxin solutions, A., 87.

Dolejšek, V., Druse, G., and Heyrovský, J., occurrence of divi-manganese in manganese salts, A., 227.

Dolejšek, V., and Heyrovský, J., occurrence of divi-manganese (atomic number 75) in manganese salts, A., 37, 258.

Doleschall, F. See Barrensheen, H. K.

Dolgorukova-Dobrianska, N. I., dehydration of α -glycols, A., 818.

Dolgov, B. See Ipativ, V. N.

Dolid, J. See Whithy, G. S.

Dollinger, coal gas poisoning; resuscitation experiments on animals with lobeline, B., 688.

Dollmer, E., and Fourrier, L., spectrum of methæmoglobin; spectrum of carboxy-hæmoglobin, A., 1080.

Dolter, H., apparatus for the manufacture of earth metals, (P.), B., 445*.

electrolytic manufacture of aluminium, (P.), B., 884.

Dombrowski, A. See Fischer, W. M.

Domke, R. See Neumann, B.

Domleo, A., and Kenyon, J., dependence of rotatory power on chemical constitution. XXX. Resolution of methylcyclohexylcarbinol, A., 948.

Dommissé, J. P. See Böeseken, J.

Domogalla, B. P., Fred, E. B., and Peterson, W. H., ammonia and nitrate content of lake waters, B., 613.

Domontovitsch, M. K., phosphate in vegetation experiments, A., 762.

Domontovitsch, M. K., and Sarubina, O. V., solubility product of dicalcium phosphate, A., 125.

Domontovitsch, M. K. See also Frianischnikov, D. N.

Dom J., natural and artificial filtration [of water] in connexion with goitre, B., 517.

Donald, M. B., reaction between sodium hypobromite and carbamide, A., 54.

Donald, W., drying hay and like crops, (P.), B., 644*.

apparatus for drying or dehydrating and distilling, (P.), B., 654.

Donaldson, J. G. See McKee, R. H.

Donaldson, J. W., thermal conductivities in industrial non-ferrous alloys, B., 328*.

Donath, E., determination of small amounts of silver in the presence of lead, A., 491.

precision measurements of heats of vaporisation at low pressures and temperatures, A., 893.

Donath, E., and Sebor, J., determination of menthol in alcoholic solutions, B., 75.

Donath, E., and Vykypil, F., origin of pyrites in coals, B., 650.

Donath, J., and Heiling, R., amino-nitrogen of blood in experimentally produced fevers, A., 850.

Donath, W. F. See Jansen, C. P.

Donati, A. See Nasini, R., and Porlezza, C.

Donde, A. See Frumkin, A.

Dondelinger, A. See Courtois, C.

Donker, H. J. L. See Kluyver, A. J.

Donnelly, J. L., action of certain sugars and alcohols on the hydrolysis of methyl acetate, A., 363.

Donnenwirth, A. L. See Randolph, D. W.

Dopter, P. L. See Lemoigne, M.

Dorabialaka, (Mile) A. See Yovanovitch, D. R.

Doran, W. See Daniel, R. J.

Dorcas, M. J. See Osterhout, W. J. V.

Dore, W. H., composition of pectin; determination of galacturonic acid in pectin, B., 171.

Dörre, C., and Barton-Wright, E. C., stone cells of the pear, A., 872.

Dörmiller, G., and Tödt, F., purifying molasses by addition of hydrochloric acid, B., 72.

Dorgelo, H. B., life-periods of the metastable s_1 and s_2 states of neon, A., 101, 552*.

photographic spectrophotometry, A., 109.

absorption of light by tungsten and molybdenum atoms in the primary and metastable states, A., 556.

Dorgelo, H. B., and Arbink, J. H., neon and helium spectrum in the extreme ultra-violet, A., 766.

Dorgelo, H. B., and De Groot, W., intensity relations of the ($2s - 2p$) combinations of the neon spectrum under different conditions of excitation, A., 650.

Dorier, P. C. See Bort, L.

Dorr Co., and Spicer, H. N., manufacture of aluminium sulphate, (P.), B., 665.

Dorr Co. See also Ankeny, C. W., McGuire, P. J., and Spicer, H. N.

Dorrer, A. See L. G. Farbenind. A.-G.

Doss, G. J. See Bray, W. C.

Dott, D. B., alleged deterioration of Indian opium on keeping, B., 419.

benzylmorphine tartrate, B., 419.

iodocasin as indicator in alkaloidai determinations, B., 419.

Douglas, A. See Prince, G. W.

Douglas Pectin Corporation, manufacture of medicinal oil preparations [emulsions], (P.), B., 721*.

Dourif, H., composite [green] pigment, (P.), B., 630.

Douthett, O. R. See Forrest, C. N.

Dovan Chemical Corporation, rubber vulcanisation, (P.), B., 453*.

Dover, M. V., comparison of lubricating efficiencies of oils and some of their physical and chemical properties, B., 571.

Dover, M. V., and Appleby, R. R., effect of ozone on oils, B., 199.

Dow, H. H., utilisation of diphenyl oxide in power generation, B., 855.

Dow, H. H., and Dow Chemical Co., controlling chemical reactions; [preparation of indoxyl], (P.), B., 135.

prepared metallic chloride and method of making it, (P.), B., 822.

Dow Chemical Co., producing anhydrous magnesium chloride, (P.), B., 488*.

manufacture of metal, more especially magnesium, from the corresponding chloride, (P.), B., 675*.

Dow Chemical Co. See also Collings, W. R., Cottringer, P., Dow, H. H., Hale, W. J., and Harlow, I. F.

Dowdell, R. L. See Harder, O. E.

Downer, G. F., [plates for] storage batteries, (P.), B., 922.

Downey, F. P. See Johnston, E. W.

Downs, C., and Bellwood, R. A., digesters or sterilisers for treating palm fruit and like nuts provided with a fibrous covering containing oil or fat, (P.), B., 20.

Downs, C. M., and Goodner, K., effect of certain substances on the precipitin reaction, A., 1051.

Downs, C. R., styptics, (P.), B., 173.

catalytic oxidation of organic compounds in the vapour phase, B., 767.

catalytic oxidation of organic compounds, (P.), B., 851.

distillation or cracking of tars, petroleum oils, and similar materials, (P.), B., 1006.

Downs, C. R., and Barrett Co., purification of [aromatic] hydrocarbons, (P.), B., 815.

Downs, W. F., purifying hydrocarbon liquids, (P.), B., 231.

treatment of low-boiling hydrocarbons, (P.), B., 231.

Dox, A. W., α -ethyltoxic acid and its esters, A., 146.

barbituric acids and the picric acid reaction, A., 180.

ring closure in chloroalkyl phenylcarbazates; six and seven-membered hydrazolactones [oxadiazines and "homo-oxadiazines"], A., 963.

Doyle, J., and Clinch, (Misc) P., pentosan theory of cold-resistance applied to conifers, A., 1280.

dehydration rates of *Conifer* leaves in relation to pentosan content, A., 1280.

Doyne, H. C., and Morison, C. G. T., absorption of iron by soils, B., 938.

Doyon, and Vial, I., isolation of an extremely active phosphorus-free anticoagulant from organs by prolonged autolysis and acid alcohol, A., 421.

Dragon, C. See De Conno, E.

Dragstedt, L. R., and Sudan, A. C., pathogenesis of tetany. V. Prevention and control of parathyroid tetany by calcium lactate. VI. By strontium lactate. VII. By oral administration of kaolin. VIII. Effect of guanidine intoxication on the blood calcium of parathyroidectomised dogs, A., 971.

Drahöse Heiz- & Widerstandskörper für Elektrizität G.m.b.H., production of electrical incandescence heating material of carbon, (P.), B., 135.

Drake, J. W. See Drakes, Ltd.

Drake, T. G. H., and Tisdall, F. F., effect of histamine on blood chlorides, A., 430.

Drake, T. G. H. See also Tisdall, F. F.

Drakeley, T. J., organic dyes in vulcanised rubber, B., 797.

Drakenfeld & Co., B. F. See Shively, R. R.

Drakes, Ltd., and Drake, J. W., apparatus for treating [quenching] coke when discharged from retorts and the like, (P.), B., 624*.

[quenching] coke when discharged from retorts and the like, (P.), B., 780*.

Draper, H. J. See Bray, W. C.

Drastich, L., economy of nutrition under different oxygen pressures, A., 912.

Drath, G. See Sauerveld, F.

Draves, C. Z., and Tartar, H. V., polysulphides of sodium and potassium, A., 800.

Draves, C. Z. See also Tartar, H. V.

Drawe, R., drying and distillation of fuel, (P.), B., 573.

drying and low-temperature carbonisation of fuels, (P.), B., 940.

Draper, W. P., manufacture of artificial silk and the like from viscose solutions, (P.), B., 314, 483*.

Drehlow, E. S. See Simeon, F.

Dreger, E. E. See Adams, R.

Dreher, G. F., and General Electric Co., impregnated insulation, (P.), B., 285*.

Drechsler, S. See Farbenfabriken vorm. F. Bayer & Co.

Dreifuss, M., method of coating vessels [with an alloy], (P.), B., 496*.

Dresdner Presshef- & Kornspiritus-Fabrik sonst J. L. Bramsch, obtaining yeast and alcohol from a molasses solution, (P.), B., 211.

Dressler, C., and American Dressler Tunnel Kilns, Inc., drying and calcining gypsum, (P.), B., 276.

Dressler, W. See Sachs, G.

Drov, H. D. K., cyclic organo-metallic compounds. I. Compounds of tellurium, A., 311.

Drew, H. D. K., and Haworth, W. N., ring structure in sugar group, A., 1125.

Drew, H. D. K. See also Morgan, G. T.

Drewsen, V., and West Virginia Pulp & Paper Co., treating waste sodium monosulphite liquors, (P.), B., 49.

Drewsen, V. See also West Virginia Pulp & Paper Co.

Dreyer, F., volume changes on dissolution in the light of the internal pressure theory of G. Tammann, A., 897.

Dreyer, U. See L. G. Farbenind. A.-G.

Dreyfus, C., manufacture of fabrics [with pattern effects], (P.), B., 785.

Dreyfus, C., and American Cellulose and Chemical Manufacturing Co., Ltd., printing of fabrics, (P.), B., 706.

Dreyfus, H., manufacture of artificial silk from cellulose derivatives, (P.), B., 122*.

manufacture of viscose, (P.), B., 402*.

manufacture of cellulosic products [esters], (P.), B., 436.

manufacture of acetic anhydride, (P.), B., 897, 995.

manufacture of acetic acid, (P.), B., 1013.

Dricasen Mareew, W. P. H. van den, reaction to distinguish between anise oil and star-anise oil, B., 768.

Drinker, K. R. See Batchelor, R. P.

Drinker, P., Thomson, R. M., and Finn, (Misc) J. L., photometric methods for studying and estimating suspensions of dusts, fumes, and smokes, B., 222.

effect of turbulent air motion and of humidity on the stability of dust, fume, and smoke clouds, B., 726.

Driver-Harris Co. See Henderson, J. C.

Drophy, D. H., and Davey, W. P., separation of zirconium and hafnium, A., 1117.

Drosté, J., analogue of Clapeyron's law in the case of evaporating electrons, A., 448.

Drunc, G., occurrence of div-manganese (atomic number 75) in manganese salts, A., 138.

Druse, G. See also Dolejsek, V.

Druse, J. G. F., and Weeks, E. J., solid hydrides of bismuth and tin, A., 1113.

Druse, J. G. F. See also Loring, F. H., and Weeks, E. J.

Drucker, C., and Luft, F., E.M.F. of calcium electrodes, A., 803.

Drucker, C., and Schingnitz, R., dissociation of lithium chloride and sodium bromide in absolute ethyl alcohol, A., 911.

Drucker, J. See Farbenfabriken vorm. F. Bayer & Co.

Drucker, P., and Faber, F., tetany, A., 753.

Drumm, J. P. See Reilly, J.

Drummond, A. M., and McMillan, A., oxidation of narcotine by hydrogen peroxide, A., 1263.

Drummond, G. M., and Holly Sugar Corporation, recovering calcium hydrate [hydroxide, from calcium saccharate], (P.), B., 561.

Drummond, J. C., modern views on vitamins, B., 296*.

Drummond, J. C., Channon, H. J., and Coward, K. H., chemical nature of vitamin-A, A., 206.

Drummond, J. C., Coward, K. H., and Handy, J., technique of testing for the presence of vitamin-A, A., 207.

Drying Systems, Inc., paper-making process, (P.), B., 269.

Drzewina, A., and Bohn, G., antagonistic biological action of metallic silver and tin, A., 1274.

activation by light of effect of silver on *Convoluta*, A., 1274.

Duan, W. P. reflexion by a crystal of its own characteristic radiation, A., 446.

Duan, W. See also Allison, S. R.

Dubbs, C. P., and Universal Oil Products Co., cracking hydrocarbon oils, (P.), B., 230, 814.

apparatus for treating hydrocarbon oils, (P.), B., 574.

cracking petroleum oil, (P.), B., 908.

treating hydrocarbon oils, (P.), B., 1005.

Dubiel, J., viscosity of fluids as a function of density; equation of state, A., 464.

Dubiel, H., determination of silicic acid and fluorine in fluorspar, sand, and silicates, B., 978.

Dubilier Condenser Co. (1925), Ltd., and Caplcotto, J. V., electron-emitting electrodes, (P.), B., 756.

Dubin, M., adhesive forces in solutions. VII. Adsorption from dilute aqueous solutions, A., 1090.

Dubois, C., treating flax, hemp, or like textile materials to obtain their fibres in a silky and supple form, (P.), B., 122.

Du Bois, E. F. See Richardson, H. B.

Du Bois, G., distillation of liquids under diminished pressure, (P.), B., 176.

Du Bois, J. A., producing hydrocyanic acid from sulphocyanic acid or its compounds, (P.), B., 13*.

production of carbon disulphide from ammonium thiocyanate, (P.), B., 360.

Dubois, O. E. See McBain, J. W.

Dubourg, J. See Dupont, G.

Duboux, M., physico-chemical analyses by seeded precipitation; applications to the determination of lime in waters and tartaric acid in wine, B., 966.

Dubreuil, R. See Leulier, A.

Du Bridge, L. A., variations in the photo-electric sensitivity of platinum, A., 448.

Dubrasay, R., phenomena of capillary chemistry, A., 119.

adsorption [at benzene-soap solution surfaces in the presence of electrolytes], A., 672.

surface actions, A., 789.

application of measurement of capillary forces to study of fatty acids, B., 99.

Dubsky, G., manufacturing linoleum, (P.), B., 333*.

Dubsky, G. See also Lobositzer A.-G. zur Erzeugung Vegetabilischer Öle.

Ducat, P. A., means for charging furnaces [with sulphur or other fusible material], (P.), B., 742.

Ducey, E. F. See Boyd, T. E.

Duck, F. J. G. See Stoughton, B.

Ducker, L. F., electrolytes for secondary batteries, (P.), B., 550.

Duckham, A. McD., tunnel kiln, (P.), B., 668*.

Duckham, A. McD., Morgan, J. S., and Thermal Industrial and Chemical (T.I.C.) Research Co., Ltd., method of heating material at successively different temperatures, (P.), B., 145*.

apparatus for heat treatment by means of a bath of molten metal, (P.), B., 224*.

Duchaux, J., adsorbent properties of cellulose nitrate, A., 899.

stability of nitrocellulose, B., 46.

Duchaux, J., and Errera, J., mechanism of ultrafiltration, A., 120*, 240.

viscosity measurements of pure liquids; a new viscosimeter, A., 343.

Duchaux, J., and Jeantet, P., rotatory power of quartz in the ultra-violet, A., 886.

measurement of the viscosity of pure liquids, A., 895.

Duchoux, E., and Cordier, G., treatment of sheep-rot virus with aldehydes, B., 930.

Ducoux, E. H., pollen of tiger lily, *Lilium tigrinum*, A., 982.

Ducrue, H. See Prandi, W.

Dudley, F. L. See Miller, M. F.

Dudley, H. W., intermediary metabolism of carbohydrates; glyoxalase content of rabbit's muscle, A., 640.

Dudley, H. W., and Rosenheim, O., spermine, A., 194. constitution of spermine. II. Methylation of spermine, A., 308.

Dudley, H. W., and Starling, W. W., constitution of spermine. III. Structure and synthesis, A., 1128, 1234*.

Dudley, H. W., and Thorpe, W. V., synthesis of *N*-methylputrescine and of putrescine, A., 53.

Dürefabr. präparierter Papiere Renker & Co., positive blue-print paper, (P.), B., 300.

Dürr, F. See Lange, E.

Dützmann, A. See Merck, E., Chem. Fabr.

Dulay, J. See Cabannes, J.

Dufek, V., corrosion of steel by acids, B., 919.

Duffendack, O. S., secondary spectrum of hydrogen, A., 7.

Duffendack, O. S., and Duncan, D. C., excitation of the spectra of nitrogen by electron impacts, A., 1.

Duffendack, O. S., and Fox, G. W., energy levels of the carbon monoxide molecule, A., 777.

Duffendack, O. S., and Huthsteiner, H., low-voltage arcs in phosphorus vapour, A., 1073.

Duffendack, O. S. See also Compton, K. T.

Duffield, F. L., apparatus for reducing iron ore and iron cinders from pyrites to metal and for other purposes, (P.), B., 411.

Dufieux, M., nature of active nitrogen, A., 330.

Dufilho, E. See Barthé, L.

Dufraisse, C., and Chaux, R., phenyl β -alkoxystyryl ketones, A., 617. stereochemistry of the styrene series; β -ethoxystyrenes, A., 949.

Dufraisse, C. See also Monreau, C.

Dufton, T. See Dufton, W. J. S.

Dufton, W. J. S. See Dufton, W. J. S.

Dufton, W. J. S., Dufton, T., Dufton, W. J., and Obank, L. S., glazing or surfacing material for tiles, slabs, and other articles, (P.), B., 130. cement compositions for making artificial stone and treatment of castings made therefrom, (P.), B., 130*.

Dugdale, C. M., and Munro, R. J., vitamins in heat-sterilised food, B., 718.

Duggan, W. F., and Scott, E. L., determination of sugar in blood, A., 442.

Dugoujon, E., production of ammonia, (P.), B., 236.

Duhame, E. C., and Compagnie Générale des Industries Textiles, washing or otherwise treating wool, silk, soiled fabrics, or other fibrous materials, (P.), B., 122, 532, 912, 1010*. centrifugal apparatus, (P.), B., 343. washing or cleaning wool, (P.), B., 975.

Duhme, E., and Lötz, A., gold from mercury, A., 930, 1015.

Duhme, E., and Siemens & Halske A.-G., apparatus for production of electrolytic iron, (P.), B., 445*.

Duhme, E. See also Siemens & Halske A.-G.

Duin, C. F. van, action of inorganic iodides on $\alpha\beta$ -dibromo-compounds. II. General character of the reaction and the influence of substituents, A., 612. determination of halogen in organic compounds by Stepanoff's method, A., 632.

Duin, C. F. van, Robinson, R., and Smith, John Charles, morphine group. III. Constitution of neopine, A., 715.

Duisberg, W., Henrich, W., and Grasselli Dyestuff Corporation, process of dyeing, (P.), B., 318*.

Duisberg, W., Henrich, W., Schepp, W., and Grasselli Dyestuff Corporation, triphenylmethane dye, (P.), B., 577.

Duisberg, W., Henrich, W., Weinand, C., Zeh, L., and Grasselli Dyestuff Corporation, dyeing cellulose esters and ethers, (P.), B., 741.

Duisberg, W., Henrich, W., Zeh, L., and Grasselli Dyestuff Corporation, monoazo-dyes, (P.), B., 731*.

Duisberg, W. See also Farbenfabr. vorm. F. Bayer & Co.

Duley, F. L., movable lysimeter for soil studies, B., 207. loss of soluble salts in "run-off" water [from soils], B., 640.

Duley, F. L., and Jones, M. M., effects of soil treatments on the draught of ploughs, B., 601.

Dulière, W., aminoethers of the ephedrine group; alkyl α -phenylpropylamine oxides, A., 503. hydrates of γ -methylamino- α -phenyl- α -propyl methyl ether (synthetic ephedrine), A., 723.

Dumanian, M., retarding of ignition produced by substances known as anti-detonators, B., 619.

Dumanian, P., and Lafitte, P., influence of pressure on the formation of the explosive wave, A., 913.

Dumaniski, A., Buntin, A. P., Dijatschkovski, S. J., and Kniga, A., complex-formation as an intermediate stage in the synthesis of colloid particles, A., 469.

Dumaniski, A., and Kniga, A., application of the Tyndall effect in the measurement of the cataphoresis of colourless sols, A., 679.

Dumas, G. M. J., continuous furnace for preparing molten aluminous cement etc., (P.), B., 948.

Du Mond, J. W. M., device for the study of the Compton effect, A., 103.

Dumont, J., separation of the slimy and colloidal components of the soil by centrifuging, B., 717.

Dumoulin, J. M., catalytic dehydration of alkylvinylcarbinols, A., 710.

Duncan, D. C., excitation of the spectra of nitrogen by electron impacts, A., 549. carbon monoxide bands, A., 991.

Duncan, D. C. See also Duffendack, O. S.

Duncan, W. M. See Ditto, M. W.

Dundon, M. L., Schoen, A. L., and Briggs, R. M., neocyanine: a new sensitiser for the infra-red, B., 566.

Dundon, M. L. See also Crabtree, J. I.

Dunham, A. A., and Casein Manufacturing Co., casein solids and process of making them, (P.), B., 383.

Dunham, H. G., McCready, M. H., and Jordan, H. E., differential media for detection of *Bacillus coli* in water, B., 302.

Dunham, H. V., and Rosemary Creamery Co., process of obtaining milk sugar [lactose from whey], (P.), B., 461.

Dunin, M. S., and Schenck, F. M., formation of the secondary systems of Liesegang rings, A., 675.

Dunkel, M., distillation of tar, pitch, and coal with superheated steam in a vacuum, B., 865.

Dunkel, M. See also Heyn, M., and Hofmann, F.

Dunkelberg, C., apparatus for cooling liquids, (P.), B., 650*.

Dunker, E. See Tröger, J.

Dunlap, F. L., and Industrial Appliance Co., treating flour, (P.), B., 27.

Dunlap, M. E., painting of treated wood, B., 948.

Dunlop Rubber Co., Ltd., and Dexter, W. J., preparing rubber-coated fabrics and apparatus therefor, (P.), B., 531*.

Dunlop Rubber Co., Ltd., and Pentold, A. E., treatment of rubber and apparatus therefor, (P.), B., 989.

Dunlop Rubber Co., Ltd., Young, H. C., and Campbell, J. D., treatment of rubber and apparatus therefor, (P.), B., 988.

Dunn, A. D., and Dunn, F. L., sampling and analysis of stomach gas, A., 1068.

Dunn, F. L. See Dunn, A. D.

Dunn, F. P. See Brady, O. L.

Dunn, H. K., effect of minute surface impurities on the photo-electric long wavelength limit of mercury, A., 1073.

Dunn, J. C., simple kinetic theory of viscosity, A., 1198.

Dunn, J. S., high-temperature oxidation of metals, A., 692. low-temperature oxidation of copper, A., 692.

Dunn, J. T., ash from powdered-fuel installations, B., 305.

Dunnicif, H. B., and Hijiawan, S. D., action of hydrogen sulphide on a neutral solution of potassium permanganate, A., 256.

Dunnicif, H. B., and Ram, K., theory of the time factor in the de Haen-Low method of determining traces of copper, A., 376.

Dunnicif, H. B., Sikka, I. S., and Hoon, R. C., system sodium sulphate-sulphuric acid-ethyl alcohol, A., 1102.

Dunnicif, H. B., and Singh, S., action of organic compounds on sodium hydrogen sulphate, A., 1014.

Dunnicif, H. B. See also Hamid, M. A.

Du Noüy, P. L., surface tension of serum; physico-chemical changes following immunisation, A., 423. surface tension of colloidal solutions and the determination of molecular dimensions, A., 902.

Dunstan, A. E., determination of unsaturated hydrocarbons, B., 335.

Dunstan, A. E., Pitkethly, R., and Beale, E. S. L., production of aromatic hydrocarbons by cracking, (P.), B., 622.

Dunstan, A. E. See also Auld, S. J. M., and Remfry, F. G. P.

Duparque, A., microscopic structure of pit-coals, A., 380.

Duplan, F., utilisation of grape residues, (P.), B., 85.

Dupont, G., and Desabres, L., crystalline salts of abietic acid. II. A., 611.

Dupont, G., Desabres, L., and Bernette, A., crystalline salts of abietic acid. I. Crystalline sodium abietate and its use in the determination of abietic acid in resins, A., 611.

Dupont, G., and Dubourg, J., acid constituents of the resin of *Pinus pinea*, A., 954.

Dupont, G. H., purification of [crude] abietic acid and production of pure abietates or abietic acid, (P.), B., 202.

Dupont, G. H., and Brus, G., manufacture of synthetic camphor [conversion of bornyl chloride into camphene], (P.), B., 932.

Du Pont de Nemours & Co., E. I. See Adamson, W. A., Burke, C. E., Calcott, W. S., Essex, H., Fall, P. H., Flaschlaender, J., Gibbs, H. D., Glover, R. E., jun., Hoffman, H. J., Jacobs, C. B., Laurie, J. W., Lentz, H. N., Lewis, H. A., Moran, R. C., Pitman, E. C., Schwartz, G. L., Scott, W., Swint, W. R., Thompson, M. S., and Whittaker, H. K.

Duquénouï, P. See Bonnet, R.

Durand, J. F., direct preparation of mixed organoberyllium compounds, A., 718.

Durand, J. F. See also Sabatier, P.

Durand, R. Huguenin Société Anonyme, production of fast shades on wool with indigo or indigo derivatives, (P.), B., 235.

Durand, R. Huguenin Société Anonyme, production of cellulose fibres, (P.), B., 785.

Durand, R. Huguenin Société Anonyme, Bader, M., Lombard, T., Sunder, C., and Vaucher, C., dyeing and printing of textile goods and other materials, (P.), B., 318*.

Durant, H. T., and Rhodes, P. W., treatment of ores, concentrates, and metallurgical products, (P.), B., 17.

Durau, F., adsorption of gases on glass and silver powder, A., 898.

Durdik, F., palladium alloys in jewellery and their detection, B., 791.

Durtill, E., use of magnesium as electrode supports in spectral analysis, A., 593.

Durham, F. M., Marchal, J., and King, H., trypanocidal action of arsenicals, A., 1173.

Durr, R., relationship of rate of oxidation with changes in reaction. I. Effect of one-sided diet, A., 861.

Durrans, T. H., preparation of sulphuryl chloride, B., 914.

Durrer, R., smelting experiments with Fricktaler and Gonzen iron ores, B., 410.

Durst, G., and Roth, H., technical analysis of indanthrene dye vats, B., 819.

Duschak, L. H., and Schuetz, C. N., metallurgy of quicksilver [mercury], B., 61.

Dushman, S. See British Thomson-Houston Co., Ltd.

Dutcher, R. A., Creighton, M., and Rothrock, H. A., vitamins. Xf. Inorganic blood phosphorus and bone ash in rats on normal, rachitic, and irradiated rachitic diets, A., 437.

Dutcher, R. A., and Kruger, J. H., vitamins. XIV. Influence of ultra-violet light on purified rations used in study of vitamin-A, A., 1065.

Dutillo, R., treating sugar juices with hypocalphite, (P.), B., 337.

Dutt, S., action of hydrazine hydrate on phenanthraquinone, A., 174. ring-chain tautomerism. XV. Phenol-succineine and glutareine, A., 725. theory of colour on the basis of molecular strain; effect of chromophoric superposition, A., 830.

Dutt, S. See also Tewari, J. D.

Duval, C., preparation of *cis*-dinitrotetramminecobalt nitrite and some derivatives, A., 488.

Duval, C., preparation of *cis*-dinitrotetramminecobalt nitrite and some derivatives, A., 488.

Duval, C., general method of preparation of nitrites, A., 627.

Duvall, M., and Prenant, M., 191; molecular concentration in internal fluids of *Acidia mentula*, Müll., A., 191.

Du Vigneaud, V., and Kar, W. G., carbohydrate utilisation. I. Rate of disappearance of dextrose from the blood, A., 192.

Dvorkovitz, P., manufacture of hard coke, (P.), B., 477.

Dworkin, S. See Cassidy, G. J.

Dworzak, R., preparation of dibromoacetal by direct bromination of paracet-aldehyde, A., 385.

Dworzak, R. See also Franke, A.

Dyer, H. A. See Voegelin, C.

Dyer, H. T., powdered fuel or gas burner, (P.), B., 815*.

Dyer, F. A., reduction of oxide ores, (P.), B., 370*. melting metals, (P.), B., 496.

Dyer, Y. A., process and apparatus for melting iron, (P.), B., 710.
 melting iron and other metals, (P.), B., 1017.

Dyke, H. B., tan, effect of sodium arsenite on the blood-sugar concentration of the rabbit and dog, A., 92.
 distribution of the active substance of the hypophysis in its different parts, A., 1064.

Dyke, R. H. van. See Van Dyke.

Dymont, S. See Piper, S. H.

Dymond, F. G., dissociation and fluorescence of iodine vapour, A., 10.
 scattering of electrons in helium, A., 980.

Dynamics Corporation of America. See Berry, H. R.

Dyson, G. M., influence of chemical constitution on the odour of mustard oils, B., 216.

Dyson, G. M., and Hunter, R. F., synthesis of alkylthiocarbimides and thiocarbamide derivatives by means of thiocarbonyl chloride, A., 718.

Dziewolski, K., and Litynski, T., diacene [diacenaphthylidene] and its ketonic derivatives, A., 160, 719.

Dziewolski, K., and Pochwalski, J., decacyclene. II. Decacyclenetetralsulphonic acid and its derivatives, A., 279.

Dziewolski, K., and Rychlik, M., phenyl α -acenaphthyl ketone [3-benzoylacenaphthene] and phenyl- α -acenaphthylmethane [3-benzylacenaphthene], A., 70, 171.

Dziewolski, K., Schoenówna, (Mlle.) J., and Waldmann, E., derivatives of β -methylnaphthalene, A., 158*.

Dziewolski, K., and Suszko, J., composition of rubicue, A., 161.

E.

Eadie, G. S., effect of substrate concentration on the hydrolysis of starch by the amylase of germinated barley, A., 1174.

Eadie, G. S., and Hunter, A., apparent dissociation constants of creatine and creatinine, A., 577.

Eagles, B. A. See Hunter, O.

Earl, A. R., and Reeves, T. W., series separation of crude petroleum, (P.), B., 183.

Earl, J. C., and Read, J., piperitone. VIII. Condensation of piperitone with aldehydes, A., 1040.

Easson, L. H. See Ludlam, E. B.

Eastcott, E. V., biogenes, inactive mother-substances of the two " bios," A., 324.

Eastman, E. D., thermo-electric effects and heat capacity of electrons in metals, A., 449.
 thermodynamics of non-isothermal systems, A., 737.

Eastman Kodak Co., photographic reversal processes, (P.), B., 997.

Eastman Kodak Co. See also Beal, C. L., Branch, L. E., Capstaff, J. G., Carroll, S. J., Clarke, H. T., Eberlin, L. W., Farrow, E. S., Gintenknst, G. O., Kimmel, V. E., Kocher, N. S., Malone, L. J., Pannett, R. F., Sheppard, S. E., Sulzer, A. F., and Webb, W. R.

Eaton, B. J., and Bishop, R. O., periodic tapping of *Hevea* [rubber trees]. II. Effect of alternate periods of tapping and resting on the quality of the rubber, B., 137.
 acceleration of vulcanisation [of rubber] by alkaloids, B., 375.
 variations in the tensile strength of rubber-sulphur vulcanisates, B., 555.

Eaton, B. J., Georgi, C. D. V., and Teik, G. L., jekitong, B., 1021.

Eaton, B. J., and Teik, G. L., essential oil from Medang lesoh [*Cinnamomum parthenoxylon*], B., 631.

Ebor, H. See Dimroth, O.

Eberhard, R., rust preventive coatings, (P.), B., 761.

Eberhard Hoesch & Söhne, rabbling apparatus, (P.), B., 114*.

Eberhardt, G. See Internat-Galalith-Ges. Hoff & Co.

Eberlein, J. B. See Steere, G. R.

Eberlein, W., and Colloisil Colour Co., Ltd., dyeing of textile fabrics [with basic dyes], (P.), B., 317.
 filters for [lake] pigment colours, rubber, etc., (P.), B., 680.
 stable pigment colours, (P.), B., 796.

Eberlin, L. W., Beal, C. L., and Eastman Kodak Co., electrodeposition of coatings of cellulose compounds; aqueous emulsions of electrodepositable cellulose compounds and coalescing agents therefor, (P.), B., 733.

Eberlin, L. W., and Eastman Kodak Co., removing pyridine from nitrocellulose, (P.), B., 122.

Eberlin, L. W. See also Beal, C. L., and Sheppard, S. E.

Ebers, K., purifying and bleaching heavy spar, (P.), B., 742.

EBerson, F., tuberculosis. VII. Active principles of tuberculin prepared from non-protein substrates, A., 1178.

Ebert, J., Dehls, J. C., and Stein, L., making isobornyl esters, (P.), B., 28.

Ebert, L., theory of dielectric polarisation in salt solutions, A., 796.
 interpretation of the dielectric polarisation of aqueous solutions, A., 906.
 determination of double ions in solutions of ampholytes, A., 906.

Ebert, W. See Strecke, W.

Echevin, R. See Combès, R.

Eck, H. van. See Biesalski, E.

Eck, P. N. ran, macro-micreactions, A., 926.
 chloramine, A., 1115.

Eckart, C., and Compton, K. T., non-oscillatory abnormal low-voltage arcs with reversed electric fields caused by ion diffusion, A., 1075.

Eckart, C., Kwei, C. T., and Compton, K. T., low-voltage arc oscillations in nitrogen and in mixtures of hydrogen and nitrogen, A., 1185.

Eckart, H., apple-juice and commercial pectin products, B., 296.

Eckart, H., and Diem, A., examination of fruit juices, B., 460.
 determination of starch in pectin and apple juices by a sedimentation process, B., 688.

Eckart, O., neutralising action of activated decolorising earths on acidified lubricating oils, B., 181.
 activated fuller's earth, B., 448.

Eckel, E. C., cement and process of making it, (P.), B., 918.

Eckermann, H. ton, micas from the limestone contact at Mansjö Mts., Sweden, A., 265.

Eckert, E., determination of silver, gold, and platinum in anode slimes, B., 243.

Eckert, F., Thuringian glass, B., 746.

Eckert, W., and Greune, H., vat dyestuff, (P.), B., 659*.

Eckert, Oppelt & Co., core for steel castings, (P.), B., 196.

Eckman, J. R. See Jordan, L.

Eckstein, H. C., distribution of amino-acids in globulin of thyroid gland, A., 636.

Eckstein, H. C., and Wile, U. J., cholesterol and phospholip content of human cutaneous epithelium, A., 969.

Economy Fuse and Manufacturing Co. See Hoskins, W.

Eldington, A. S., spinning electrons, A., 654.

Eddy, C. E., and Turner, A. H., L-emission series of mercury, A., 652.

Eddy, E. D., and Campbell, A. W., combined washers and dryers of the continuous centrifugal type, (P.), B., 33.

Eddy, H. C., and Petroleum Rectifying Co. of California, dehydration process [for oil emulsions], (P.), B., 117.
 dehydrating oil, (P.), B., 525.

Eddy, W. H., vitamin content of foodstuffs, B., 718.

Eddy, W. H., Kohman, E. F., and Carlsson, V., vitamins in canned foods. IV. Green peas, B., 213.

Eddy, W. H. See also Kohman, E. F.

Edeleanu, L., motor fuel, (P.), B., 622.
 manufacture of light hydrocarbons, (P.), B., 700.

Eder, J. M., spectral sensitivity of chromates with organic substances, A., 774.
 comparative tables of spectral sensitivity of silver bromide, iodide, and chloride, and the action of the chief colour sensitizers, B., 611.

Eder, R., and Kutter, F., equilibrium of lactic acid and lactic anhydride in commercial lactic acid, A., 499.
 acidimetric titration and composition of commercial lactic acid, B., 690.

Eder, R., and Manoukian, O., β -methylanthraquinone derivatives. VII. Nitro-derivatives of 1-hydroxy-3-methylanthraquinone and related products, A., 407.

β -methylanthraquinone derivatives. VIII. Bromination of 1:8-dinitro-2-methylanthraquinone, A., 839.

β -methylanthraquinone derivatives. IX. Action of sulphite on 1:5- and 1:8-dinitro-2-methylanthraquinone, A., 839.

Eder, R., and Schneiter, W., determination of santonin in santonin pastilles, B., 172.
 evaluation of podophyllin, B., 384.

Edgar, R. H. See Evans, W. L.

Edgar, S. H. See Cooper, E. A.

Edison, T. A., and Edison, T. A., depolarising agent for voltaic battery, (P.), B., 986.

Edison, T. A., Inc. See Edison, T. A.

Edison Swan Electric Co., Ltd., and Percival, G. A., tungsten wire [for electric lamps], (P.), B., 953.

Edison Swan Electric Co., Ltd., and Radio-Röhren-Lab. G. Nickel Ges.m.b.H., manufacture of electro-ionic discharge tubes, (P.), B., 254.

Eidbacher, S., intermediary metabolism of histidine, I., A., 1171.

Eidler, H., electrical purification of gases, (P.), B., 371.

Edmund, J. E., and Lewis, E. P., influence of nutrient supply on earliness of maturity in cabbage, B., 960.

Edsall, J. T., phosphates in non-irritable muscle, A., 861.

Edser, E., Beasley, W. H., and Minerals Separation North American Corporation, treatment of finely-divided coal and production of briquettes, (P.), B., 41*.

Edsor, E. See also Fowler, S.

Edwards, J., rubber coagulated with sodium silicofluoride, B., 288.

Edwards, C. A., and Pfeil, L. B., tensile properties of single iron crystals and influence of crystal size on the tensile properties of iron, A., 230*; B., 161*.

Edwards, C. H. See Derby, J. H.

Edwards, E., Bowen, I., and Alty, S., effect of torsion on certain elastic properties of wires, A., 831.

Edwards, E. T., use of sodium aluminate as a coagulant, B., 342.

Edwards, G. A., synthetical work on the isoquinoline alkaloids. I. Substituted o-carboxyphenylethylamines, A., 735.
 synthetical work on the isoquinoline alkaloids. II. A method of opening the rings of cyclic ketones, A., 835.

Edwards, H. L., treating [dehydrating] apparatus for crude oil, (P.), B., 525.

Edwards, H. T. See Buckman, T. E.

Edwards, J., means for agitating and stirring molten metal in open-hearth furnaces, (P.), B., 549*.

Edwards, J., fifty years' progress in aluminium, B., 832*.

Edwards, J. D., and Taylor, C. S., electrical resistivity of aluminium-calcium alloys, B., 883.

Edwards, J. D. See also Archer, R. S.

Edwards, K. B., and Willmore, E. S. R., composition of coal tars, B., 353.

Edwards, K. S., and Worswick, B., viscosity of ammonia gas, A., 118.

Edwards, T. I., resistivity and conductivity of dilute amalgams at various temperatures, A., 783.

Edwin, E., preparation of the gas mixture for ammonia synthesis, (P.), B., 321.
 production of mixtures of hydrogen and nitrogen, (P.), B., 630.

Effron, J., variations in absorptive power, B., 380.
 variations in the absorptive properties of yeast, B., 380.

Effron, J. T. A., manufacture of pressed yeast, (P.), B., 845.

Ege, R., residual reduction of blood, A., 854.

Eger, H. H. See Skrabal, A.

Egg, C. See Kohlschütter, I.

Egger, F., control of the aluminium sulphate process for the purification of drinking water, B., 422.
 works experience in the supervision of rapid filtration plant [for the purification of water], B., 771.

Egger, J., mechanism of the action of light on silver halides, B., 1030.

Egger, J., [with Wachholz, F., and Schmidt, R.], reactions caused by light-excited bromine, A., 135.

Egger, J., and Noddack, W., photochemistry of photographic films, B., 109.

Egger, J., and Reitschöter, J., mol. wt. and gel state of gelatin, A., 1098.

Egger, J. See also Book, G.

Egger, A. H., effect of p_{H_2} on the germicidal action of soaps, B., 954.

Egleston, J. A. See Richmond, H. D.

Egleton, P., action of pure phosphatides on the perfused heart of the frog, A., 639.

Egleston, J. E., and General Chemical Co., absorbing hydrochloric acid gas, (P.), B., 88.

Egloff, G., treating [cracking hydrocarbon] oil, (P.), B., 526.

Egloff, G., Benner, H. P., and Universal Oil Products Co., dehydrating emulsified oils, (P.), B., 6.
 treating [hydrocarbon] oil, (P.), B., 231.
 dephlegmator, (P.), B., 567.
 apparatus for treating oil, (P.), B., 863.
 cracking of [hydrocarbon] oil, (P.), B., 941.

Egloff, G., and Henry, V., direct production of "end-boiling-point petrol" from heavy oils, B., 619.

Egloff, G., and Morrell, J. C., determination of unsaturated, aromatic, naphthalene, and paraffin hydrocarbons in motor fuels and their automotive equivalents, B., 570.

Egloff, G., Morrell, J. C., and Universal Oil Products Co., dehydration of oil, (P.), B., 6.

Egloff, G., and Universal Oil Products Co., cracking petroleum, (P.), B., 41.

Egloff, G., blending and purifying light hydrocarbons, (P.), B., 478.

Egloff, G. See also Morrell, J. C.

Eigner, H., conductivity of mixtures of strong electrolytes, A., 128.

Eigner, M., See Badische Anilin- & Soda-Fabrik.

Egorov, M. A., izum calcareous phosphorite and the plant under different conditions of soil moisture, B., 763.

Egorov, M. A., and Mackov, P. F., conditions of the application and action of phosphates in black soil. III. Dynamics of the lime and ferric oxide plus alumina of the soil and the conditions influencing it, B., 763.

Ehrenberg, C., Wiederhold, H., Krug, C., Holsboer, M. G., Fischer, Karl, and Studien-Ges. für Ausbau der Industrie m.b.H., desulphurising agent for iron and other metals, (P.), B., 62.

preparation of carbides, (P.), B., 237.

preparation of hydrogen sulphide, (P.), B., 237.

manufacture of electrode-carbon, (P.), B., 284.

manufacture of porous bricks or bricks containing metals or metal oxides, (P.), B., 364.

manufacture of staining solutions and lacquers from soft lignite, (P.), B., 411.

Ehrenberg, P., carbon dioxide [and plant growth], B., 378.

Ehrenberg, R., charcoals from colloids, A., 192.

aging process, A., 193.

tryptic digestion with low concentrations of enzymes. III., A., 203.

radiometric micro-analysis. I. and II., A., 328, 429.

partition problems. I. Organic lead compounds, A., 431.

Ehrenberg, W., symmetry of the ions in the crystal lattice, A., 338.

Ehrenfeld, L. See Whitmore, F. C.

Ehrenhaft, F., existence of the sub-electron, A., 880.

Ehrenhaft, F., and Wasser, E., determination of the size, mass, and charge of sub-microscopic spheres of radius from 4×10^{-4} to 5×10^{-4} cm., A., 888.

Ehrenreich, A., and Bendixen, K., utilising the skins of chondropterygians and placostomes, (P.), B., 705.

Ehrenstein, M., decomposition of xylan by enzymes, A., 502.

Ehrenstein, M. See also Karrer, P.

Ehrhardt, E. F., and Hereward, R. M., manufacture of naphthylamine sulpho-acids, (P.), B., 736.

Ehrlich, A. See Bettzische, F.

Ehrlich, F., and Schubert, F., incrustations of flax, A., 547.

Ehrlich, F., and Sommerfeld, R. von, pectins of the sugar-beet, A., 141.

Ehrlich, O., preparation of pale-coloured condensation products of phenols and formaldehyde [artificial resins] stable to light and air, (P.), B., 760.

Ehrlich, V., [heat of formation of calcium cyanamide], A., 655.

Ehrmann, V. See Gault, H.

Eibner, A., drying of fatty oils, B., 201.

evaluation of white pigments, B., 414.

Eibner, A., and Blunzner, H., "oxyins." III. Occurrence and detection of polymerisation in the drying of oils, B., 688.

Eibner, A., and Rasquin, H., catalysis of the drying of fatty oils at ordinary temperatures; formation of varnish in the cold, B., 247.

Eibner, A., and Reitter, F., standardisation of drying oils; group of paint oils containing linolenic acid; conifer seed oils and the isomeric linolenic acids, B., 593.

Eibner, A., and Schwaiger, J., China wood [tung] oil, B., 448.

Eibner, A., Widenmayer, L., and Stois, A., examination of inorganic pigments in the dark field of the analytical quartz-lamp, B., 759.

Eichelbaum, G., method for working up animal organs, (P.), B., 853.

Eichelberger, L., iodination of acetylene derivatives. I. Preparation of di-iodofumaric acid, A., 713.

Eichelberger, L. See also McCluskey, K. L.

Eichelberger, M., effect of light on creatinine and creatine excretion and on basal metabolism, A., 974.

Eichholz, F., Robison, R., and Brull, L., hydrolysis of phosphoric esters by the kidney *in vivo*, A., 88.

Eichholz, F. See also Brull, L.

Eichholz, W., and Dalmer, O., injectable, homogeneous, oily preparation of bismuth [naphthenate], (P.), B., 460.

Eichholz, W. See also Merck, F.

Eichler, O., and Hildebrand, F., pentamethylenetetrazole (cardiazol). II., A., 1057.

Fischer, T. See L. G. Farbenind. A.-G.

Eichwald, E., production of hydrocyanic acid, (P.), B., 273.

Eichwede, H., Fischer, E., and Grasselli Chemical Co., dyeing cellulose ethers, (P.), B., 1011.

Eigenberger, E., colloid absorption in quantitative analysis, A., 674.

colloid absorption in quantitative analysis, especially in the micro-determination of sulphur in organic substances by Fregi's method, A., 701.

Eigner, A. See Klein, G.

Eller, A., diagram of state of calcium and mercury, A., 356.

preparation of high-percentage calcium amalgams by electrolysis, (P.), B., 332.

Einhorn, S., action of organic acids on beryllium carbonate, A., 401.

Einsler, O. See Farbenfabr. vorm. F. Bayer & Co.

Eisemann, M., See Skarsup, S.

Eisen- & Stahlwerke Hoesch A.-G. See Flössel, C.

Eisenbeck, H., aluminous cements, B., 408.

Eisenbrand, J. See Halban, H. von.

Eisenhart, A. See L. G. Farbenind. A.-G.

Eisenlohr, F. [with Gorr, G.], molecular coefficients of refraction of polymethylene compounds, A., 718.

Eisenmann, A. J. See Peters, J. P.

Eisenreich, R., and Reis, A., ascription of band spectra to chemical substances based on experiments with flames, A., 556.

Eisenstein, A., separation of fatty acids from glycerides, (P.), B., 887.

Eisenstein, A., and Schicht, G., oxidising oils, (P.), B., 202.

Eisenstein, A. See also Schicht, G.

Eisenwerk-Gesellschaft Maximilianshütte, production of high-tensile steel, (P.), B., 329.

Eisinger, J. O. See Sparrow, S. W.

Eisler, A. See Barrenscheen, H. K.

Eisler, M., influence of adsorption on charcoal on toxicity, A., 864.

Eissner, W. See Hein, F., and L. G. Farbenind. A.-G.

Eistert, B. See Arndt, F.

Eitel, W., synthesis and modes of occurrence of scapolites, A., 266.

Eitel, W., comparison of maize and potato starches for textile finishing, B., 706.

Ekkert, L., reaction of alkaloids with furfuraldehyde and sulphuric acid, A., 533.

colour reactions of morphine, A., 965.

differentiation of veronal, propional, and luminal, B., 802.

Ekkert, L., and Winkler, L. W., colour reactions of phenols with sodium nitro-prusside, A., 1033.

Elain, C. F., orientation of crystals produced by heating strained iron, A., 228*; B., 162*.

tensile tests of large gold, silver, and copper crystals, A., 1085.

Elain, C. F. See also Taylor, G. J.

Elberthzagen, H., colloidal solutions and the second law of thermodynamics, A., 302.

Elbogen, S. See Urban, K.

Elder, A. L. See Greenfield, R. E.

Eldred, B. E., Graham, R. N., and National Carbon Co., method of treating particles of matter [coal], (P.), B., 397*.

Elbridge, R. B., treating [purifying] zinc sulphate solutions, (P.), B., 320.

Electric Furnace Co., Ltd. See Taylor, G. E.

Electric Smelting & Aluminium Co. See Cowles, A. H.

Electro-Metallurgical Co., heat-treated alloy steels containing zirconium, (P.), B., 411.

Electro-Metallurgical Co. See also Bagley, G. D., Becket, F. M., and MacQuigg, C. E.

Electron Relay Co. See Laise, C. A.

Elek, A., and Sobotka, H., Kjeldahl-Pregl method applied to nitro-compounds, A., 632.

Elektrische Gasreinigungs-G.m.b.H., and Rohmann, H., treatment of gases containing dust and smoke, prior to purification, (P.), B., 177.

Elektrische Gasreinigungs-G.m.b.H. See also Rohmann, H.

Elektrische Glühlampf. "Watt" Aktien-Gesellschaft, coating the internal metal parts of electric lamps with chemical preparations, (P.), B., 757.

Elektrizitäts-A.-G. vorm. Schuckert & Co. See Pitz, F.

Elektro-Osmose Aktien-Gesellschaft (Graf Schwerin Ges.), preparation of low-ash coal, (P.), B., 308.

obtaining milk sugar [lactose] from whey, (P.), B., 419.

Elektro-Osmose Aktien-Gesellschaft (Graf Schwerin Ges.), Kolbach, P., Windisch, W., and Dietrich, W., production of hop extracts, (P.), B., 26.

Elenbaas, A., apparatus for crushing ferruginous and agglutinative substances, (P.), B., 111.

Elford, W. J. See McBain, J. W.

Elias, N. M. See Harris, C. P.

Elias, O. A., preparation of aerated beverages, (P.), B., 233.

Elion, L., chlorination of *o*- and *p*-aminobenzoic acids, A., 165.

formation of acetyl methylcarbinol during the fermentation of sucrose by yeast, A., 543.

formation of acetaldehyde and acetyl methylcarbinol during the fermentation and respiration of yeast, A., 758.

Elkington, V., drying of agricultural or horticultural products, such as hops, and seeds, (P.), B., 211, 1023*.

Elladi, E. See Palladin, V.

Ellenberger & Schrecker, recovery of chromium [from leather waste], (P.), B., 663.

Ellenberger & Schrecker, and Huppert, O., manufacture of glue from chrome leather, (P.), B., 600.

Eller, W., and Schöppach, A., decomposition of humic acids at 100°, B., 257.

Elett, A., Foote, P. D., and Mohler, F. L., polarisation of radiation excited by electron impact, A., 221.

Elett, A. See also Breit, G.

Ellinger, P., catalytic reactions, (P.), B., 729.

Ellinger, P., and Gans, O., biological action of X-rays. III. Sensitisation to Rontgen rays by thorium salts, A., 320.

Ellinger, P., and Lenzkera, B., pharmacology of cell respiration. VI. Cyanide-charcoal; cyanide-chopped muscle systems, A., 863.

Ellinghaus, J., modifications of Folin's method for urea determination, A., 327.

Ellinghaus, J., Müller, E., and Steudel, H., metabolism of the suckling, A., 197.

Ellinghaus, J. See also Steudel, H.

Ellington, O. C., proposed British standard table of wire screens. I. and II., B., 471, 303.

Ellingworth, S. See Browning, C. H.

Elliott, W., mineral content of pasture grass and its effect on herbivora. I. General, B., 251.

Elliott, W., and Crichton, A., mineral content of pasture grass and its effect on herbivora. II. Effect of addition of mineral salts on the ration of sheep, B., 251.

Elliott, W., Orr, J. B., and Wood, T. B., mineral content of pasture grass and its effect on herbivora, B., 251.

Elliott, F. A., electrodeposition of rubber, B., 682.

Elliott, G. A., Kleist, L. L., Wilkins, F. J., and Webb, H. W. [with Peppercell, R.], nitrosylsulphuric acid, I., A., 811.

Elliott, H. L. See Carroll, R. A.

Elliott, W. S., degassing or deaerating liquids [boiler feed water], (P.), B., 302*.

Ellis, C., synthetic resin coating composition, (P.), B., 68.

ketone-alcohol resin, (P.), B., 68.

resinous bodies from a phenol, furfural, and other aldehydes, (P.), B., 797.

Ellis, C., and Chadeloid Chemical Co., paint and varnish remover containing furfuraldehyde, (P.), B., 890.

Ellis, C., and Ellis-Foster Co., oxidation of ammonia, (P.), B., 51.

cyclohexanol-aldehyde resin, (P.), B., 68.

coumarone resin composition, (P.), B., 248.

fluxed resinous composition, (P.), B., 502.

magnesium-containing synthetic resin, (P.), B., 596.

moulding composition containing organo-magnesium compounds, (P.), B., 596.

treating wood tar oil, (P.), B., 815.

Ellis, C., and Hunt, S. B., treating hydrocarbon gases, (P.), B., 898.

Ellis, C. See also Knhn, J. R.

Ellis, C. D., and Wooster, W. A., atomic number of a radioactive element at the moment of emission of the γ -rays, A., 6.

β -ray type of disintegration, A., 6.

Ellis, D., cause of the blackening of the sand in parts of the Clyde estuary, A., 378.

iron incrustation in water pipes, B., 142.

Ellis, G. H., Stevenson, F. M., Crot, C. M., and American Cellulose and Chemical Manufacturing Co., dyeing of cellulose acetate, (P.), B., 977*.

Ellis, G. H. See also British Celanese, Ltd.

Ellis, G. W., chemistry of drying oils, III., B., 675.

Ellis, J. W., band series in infra-red absorption spectra of organic compounds, I. and II., A., 454, 883.

molecular spectrum of carbon dioxide, A., 774.

emission from the Bunsen flame, A., 1192.

Ellis, N. R., and Hankins, O. G., soft pork, I. Formation of fat in the pig, A., 197.

Ellis, N. R., and Isbell, H. S., soft pork, II. Influence of food on composition of body fat of hogs, A., 197.

Ellis, O. W., influence of pouring temperature and mould temperature on the properties of a lead-base anti-friction alloy, B., 328*.

Ellis, O. W. See also Ferguson, J. B.

Ellis, R., and Ellis Flotation Co., [ore] separating process, (P.), B., 331*.

Ellis Flotation Co., concentrating ores and other materials, (P.), B., 549*.

Ellis Flotation Co. See also Ellis, R.

Ellis-Foster Co. See Ellis, C., Maze, A. E., and Meigs, J. V.

Elmores, F. E., and Christensen, N. C., treatment of argenticiferous sulphide ores, (P.), B., 133.

Elmores, J. W., determination of strichnine in poisoned grains, B., 614.

Elod, E., theory of the dyeing process, B., 316.

Elod, E. See also Askenasy, P., Bredig, G., and Koepp & Co., R.

Elouard. See Chavastelon.

Elsaesser, E., Löwen, W. zur, and American Bemberg Corporation, gutter or channel for treating artificial threads or yarns, particularly imitation-silk yarns, with acids or an acid-containing liquor, (P.), B., 10*.

Eladon, G. D., Jena sintered glass crucibles [in sugar determinations], B., 169.

Elson, G. D., and Smith, P., determination of palm kernel oil and butter fat in margarine, B., 295.

Elsenbast, A. S., and Celite Co., dehydrating liquids, (P.), B., 255.

Elsey, H. M., diffusion of helium and hydrogen through quartz glass at the ordinary temperature, A., 895.

Elsmine, G. V. See Brady, O. L.

Elvehjem, C. A., and Hart, E. B., iron in nutrition, II. Determination of iron in biological material, A., 443.

Elvehjem, C. A. See also Hart, E. B., and Peterson, W. H.

Elvins, O. C., and Nash, A. W., reduction of carbon monoxide, A., 917.

synthetic fuel from carbon monoxide and hydrogen, B., 570.

Elvins, O. C. See also Morgan, G. T.

Elvoe, E., examination of neosalvarsan, and sulpharsphenamine, B., 27.

Elze, F., essential orange-flower extract oil, B., 803.

farneol in jasmine flower oil, B., 1028.

Emden, G., and Hentschel, H., phosphoric acid production in fatigued frog's muscle, A., 427.

Emden, G., Hirsch-Kaufmann, H., Lehnartz, E., and Deuticke, H. J., lactic acid changes in tetanus, A., 427.

Enden, F., action of nitrogen tetroxide on caoutchouc, B., 137.

Weber's dinitrocaoutchouc and a nitrosate $C_8H_4N_2O_4$, B., 374.

theory and practice of the acceleration of vulcanisation, B., 925.

Emeléus, H. J., inhibition of the glow of phosphorus, A., 777.

Emeléus, K. G. See Chadwick, J.

Emer, O. See Trautz, M.

Emery, A. B., concentration of ores, (P.), B., 1018*.

Emery, W., refractories for gas retorts, with special reference to silica, B., 145.

Emich, F., rubidium (cesium)-silver-gold halides, A., 562.

Emley, W. E. See Richardson, D. F.

Emmer, H. See Badische Anilin- & Soda-Fabrik.

Emmett, A. M., comparison of various methods of obtaining ash-free pectin, A., 872.

Emmett, A. M., and Carré, M. H., calcium pectate method for the determination of pectin, A., 444.

Emmett, P. H. See Benton, A. F.

Empire Machine Co., drawing and flattening sheet glass, (P.), B., 192*.

Emschwiller, G., action of magnesium on methylene iodide, A., 1224.

Endell, K., and Steger, W., temperature-sensitivity of refractory materials in the glass industry, B., 789.

Enderl, M., and Koepp & Co., R., manufacture of sodium formate from carbon monoxide, (P.), B., 323*.

Enderlin, F. See Zetzsche, F.

Endo, H., relation between the equilibrium diagram and the magnetic susceptibility in binary alloys, B., 327.

Endo, H. See also Honda, K.

Endo, K., molecular association of phenol in benzene and water, A., 469.

Endres, H. A., and Celite Co., article of manufacture; [calcium silicate derivative], (P.), B., 439.

Engel, A., preparation of substances which alone or with other greasy substances form salves, (P.), B., 552.

Engel, C., manufacture of a foodstuff [from yeast], (P.), B., 297.

Engel, H., and Frobose, V., volatilisation of lead during lead burning, using different flames, B., 281.

Engel, L. See Weinland, R.

Engel, W. See Herzfeld, E.

Engeland, R., new hydrolysis product from elastin, A., 54.

Engelhardt, C. J. See also Nelson, W. L., Rudisill, W. A., and Wescott, B. B.

Engelhardt, A., and Sielman, H., excretion of chlorine by the kidneys after exposure to X -rays, A., 1053.

Engelhardt, H., physics and chemistry of gas masks, B., 110.

Engelhardt, H., antigenic properties of haemoglobin, A., 193.

Engelhardt, H., and Gertschuk, M., micro-determination of amylase, A., 413.

Engelhardt, G. K., and Grady, C. B., heat exchangers, (P.), B., 696*.

Engels, O., determination of easily available phosphoric acids in soils by the newer methods, B., 600.

solubility of soil potassium and response to potassium fertilisers, B., 641.

Engelstad, A. See Cross, C. F.

England, E. H. See Richmond, H. D.

Engle, (Miss) D. G., and Hopkins, B. S., luminescence, A., 224.

Englis, D. T., Decker, R. T., and Adams, A. B., preparation of rafinose from cattouc seed meal, A., 51*.

Englis, D. T., and Lunt, H. A., effect of concentration of potassium salts in soil media on the carbohydrate metabolism of plants; diastatic activity of the nasturtium, A., 143.

English, S., effect of composition on the viscosity of glass. IV. Calculation of the influence of minor constituents, B., 585.

English, S. See also Cousens, A.

Engst, T., orbits and radiation of hydrogen electrons, A., 991, 1191.

Enke, F. E. J., rotary furnace [for roasting zinc blends], (P.), B., 885.

Enklaar, C. J., phenylacetaldehyde, A., 614.

aliphatic terpenes and their derivatives, V., A., 619.

regularities in m. p. and b.p. of methyl mercuri-salts and the corresponding acids; structure of hydrocyanic acid and the cyanides, A., 718.

Enna, F. G. A., analysis of Prussian blue, B., 795.

Enock, A. G., centrifugal machines, (P.), B., 639.

Enriques, E., and Sivò, R., determination of bilirubin in sera and intestinal fluids, A., 618.

Ensoll, R. E., recovery of hydrochloric acid from ferrous chloride solutions, (P.), B., 583.

Ensslin, H. See Bergmann, J.

Ephraim, F., additive compounds of hydrogen chloride and metallic sulphates, I. and II., A., 36, 587.

ammoniums of metallic sulphates, A., 809.

Ephraim, F., and Beck, G., heavy-metal vanadates and their ammoniacal compounds, A., 370.

Ephraim, F., and Schütz, O., volume relations of the cobaltammines, A., 785.

volumes of uncombined halogen atoms or ions, A., 1193.

Ephraim, F., and Seger, E., relation between solubility and retention of water of crystallisation in the salts of aromatic sulphonic acids, A., 18.

Ephraim, F. See also Schütz, O.

Ephraim, F., production of barium salts, (P.), B., 53.

Eppe, P., and Ruhemann, S., pine oil and the products of its autoxidation, B., 298.

Eppler, W. F., and Rose, H., [hardness of] diamond, A., 665.

Eppley, (Miss) M., spark between carbon rods impregnated with a mixture of oxides of molybdenum, titanium, and vanadium as the source of a closely spaced line spectrum in the visible region, A., 446.

Epstein, A. K., egg product [emulsifying agent], (P.), B., 896.

Epstein, C. See Fodor, A.

Epstein, G. See Rawdon, H. S.

Epstein, P. S., Schrödinger's quantum theory and the Stark effect, A., 987, 1187.

Erasmus, P. See Goldschmidt, T. A.-G.

Erbacher, O. See Hahn, O., and Willstätter, R.

Erben, F. X., Philipp, R., and Maulwurf, O., cinchona alkaloids; transformations of diazotised amino-derivatives, A., 1169.

Erben, F. X., Philipp, E., and Schniderschitz, N., [with Sporer, F., and Diamant, E.], action of arsenic trichloride on dehydroquinine, quinine, and dihydroquinine, A., 188.

Erdmann, V. See Dobroserdov, D.

Erdmann, W. See Sablitschka, T.

Erdödy, F. G. See Dafert, O.

Erdö & Kohle-Verwertung A.-G., and Zernik, F., disinfectants, (P.), B., 30.

Erdwe München O. Lietzenmayer, making bleaching earth from slag, (P.), B., 439.

Erle, E. See Küster, W.

Erickson, J. E. L. See Nicholas, H. O.

Erie Glass Co., manufacture of sheet glass, (P.), B., 1015*.

Erikson, H. A., ions from hot platinum, A., 4.

mobility of the ions of the active deposits of thorium and radium, A., 4.

mobility of acetylene ions in air, A., 989.

independence of the mobility and mass of an ion, A., 1074.

isolation of two positive substances in thorium active deposit, A., 1190.

Erikson, S. E. See Okay, R.

Eriksson, G., and Hultén, E., band spectra of aluminium, A., 107, 334.

Eriksson, J. A., manufacturing porous artificial stone, (P.), B., 981.

Eriksson, S. E. See Euler, H. von.

Erlach, A., preparation of quinol, (P.), B., 434.

Erländsen, L., solubility of cholesterol in ethyl and methyl alcohol at different temperatures, A., 893.

Erlanger, M. S. See Clark, E. R.

Erlenneyer, H., do free alkyl radicals occur in the Kolbe electrochemical synthesis of hydrocarbons ? A., 46.

preparation of potassium phenoxide, A., 831.

reaction of benzoyl peroxide with iodine, A., 1138.

Erlenneyer, H. See also Fichter, F.

Erlwein, G. See Siemens & Halsko A.-G.

Ernst, F. A., equipment for high-pressure reactions, B., 647.

Ernst, O. See Farbw. vorm. Meister, Lucius, & Brüning, and L. G. Farbenind. A.-G.

Ernst, P. See Fischer, Hans.

Ernst, W. See Auwers, K. von.

Ernst, Z., and Förster, J., chemistry of the blood-sugar in insulin hypoglycaemia, A., 646.

Ernst, Z., and Weiss, S., measurement of blood for micro-analysis without a torsion balance by means of a pipette, A., 443.

Errera, J., influence of molecular structure on the dipolar character of ethylenic isomericides; calculation of molecular moment, A., 225.

influence of molecular structure on dielectric polarisation, A., 779.

polarisation of a medium and its molecular structure; electric moments of dihalogen derivatives of benzene, A., 779.

optical properties of isomeric ethylenic compounds; ultra-violet absorption spectra of dihalogen derivatives of ethylene, A., 884.

Errera, J., and Henri, V., chemical reactions produced by β - and γ -rays of radium on compounds in the vapour state, A., 1077.

Errera, J., and Lepingle, M., specific inductive capacity and ethylenic stereoisomerism, A., 177.

Errera, J. See also Dulaux, J.

Erste Böhmische Kunstdseidefabrik A.-G., viscose artificial silk fibres, (P.), B., 704.

Escande, L. See Camichel, C.

Esch, W., rubber mixtures with modern reinforcing agents, B., 597.

preservatives against ageing for rubber vulcanised with sulphur chloride, B., 838.

Esch, *H.*, rubbered raincoats and rubber solutions, *B.*, 890.
 Escher, *K.* See Karrer, *P.*
 Escher-Descrivères, *J.*, polonium, *A.*, 879.
 Escalong, *R.*, separation of the various orders of spectra of cadmium, *A.*, 446.
 Escourrou, *C.*, catalytic hydrogenation under reduced pressure, *A.*, 45*. natural methylheptene. II. Alcohols, dienes, and cyclogeraniolenes. I., *A.*, 1022.
 diethylenic hydrocarbons. II., *A.*, 1120.
 cyclic compounds [*γ*-cyclogeraniolenes]. III., *A.*, 1238.
 Esrochi, *J.* See Povarnin, *G.*
 Esseen, *G. J.*, jun., and Badger Fire Extinguisher Co., foam-stabilising composition, *(P.)*, *B.*, 33.
 Esseen, *G. J.*, jun., and United Fruit Co., decolorising and defecating product, *(P.)*, *B.*, 396. [Motor] fuel, *(P.)*, *B.*, 733.
 Essex, *H.*, and Pivovarski, *E.*, determination of the porosity of coke, refractory bricks, and rammed moulding sand, *B.*, 622.
 Essers, *H.* See Benrath, *A.*
 Essex, *H.*, and Gelormini, *O.*, velocity-temperature coefficient in liquid media, *A.*, 579.
 Essex, *H.*, Ward, *A. L.*, and Du Pont de Nemours & Co., *E. I.*, making dihydroxy-carbon compounds, *(P.)*, *B.*, 897. making halogenides, *(P.)*, *B.*, 931.
 Eassin, *O. A.*, electrolytic formation of ammonium persulphate, *A.*, 804.
 Eassin, *O. A.* See also Mokruschin, *S.*, and Stscherbakov, *I.*
 Estelle, *A. T. K.*, treatment of iron sulphide ores containing other metals, *(P.)*, *B.*, 132.
 Esterer, *M.*, improving metal castings, *(P.)*, *B.*, 1018.
 Estill, *H. W.*, and Nugent, *R. L.*, confirmatory test for aluminium, *A.*, 263.
 Etablissements P. Noé & Co., impregnation of wooden posts, *(P.)*, *B.*, 364*. Etablissements Poulenc Frères, manufacture of new salts of cinchona alkaloids, *(P.)*, *B.*, 769. preparation of chlorides of urethanebenzoic acids [ethyl carboxyphenyl-carbamates] and their side-chain homologues, *(P.)*, *B.*, 898.
 preparation of *N*-aminobenzoyl derivatives of aminoarylsarcinic acids, *(P.)*, *B.*, 899.
 Etablissements Poulenc Frères, and Oechslin, *C.*, alkylhydroxylalkyl- and dihydroxylalkyl-sarcinic acids, *(P.)*, *B.*, 364.
 Etablissements Poulenc Frères. See also Oechslin, *C.*
 Eeckine, *G.*, Verain, *M.*, and Bourgeaud, *M.*, determination of *p*_{*H*} of blood; new hydrogen electrode, *A.*, 1067.
 Els, *H. N.* See Williamson, *C. S.*
 Eitel, *V.* See Votček, *E.*
 Ettisch, *G.*, fractionation of serum proteins. II. Theory of electrodialysis, *A.*, 751.
 Ettisch, *G.*, and Beck, *W.*, fractionation of serum proteins. I. Electrodialysis, *A.*, 751. fractionation of serum proteins. III. Precipitation by acids, *A.*, 856.
 Ettel, *G.*, and King, *C. C.*, seed and oil of *Johannesia princeps*, *B.*, 592.
 Eucken, *A.*, what is a metal? *A.*, 782.
 configuration of the carbon dioxide molecule, *A.*, 882.
 Eule, *M.*, influence of photographic fixing baths and their constituents on different metals, *B.*, 29.
 Euler, *H. von*, coupled fat and carbohydrate metabolism, *A.*, 208. growth of micro-organisms on irradiated, lipid-containing substrates, *A.*, 435. affinity constants of enzymes, *A.*, 861.
 enzyme affinity. II., *A.*, 866.
 Euler, *H. von*, and Barthel, *C.*, fermentation and growth in dry yeast-cells, *A.*, 1276.
 Euler, *H. von*, and Brunius, *E.*, amino-derivatives of sugars, *A.*, 940. zymophosphate formation and biochemical transformation of sugar, *A.*, 1061.
 Euler, *H. von*, Brunius, *E.*, and Josephson, *K.*, reactions between sugars and amines. II. Dextrose and amino-acids, *A.*, 822.
 Euler, *H. von*, and Eriksson, *S. E.*, enzymic cleavage of sinigrin, *A.*, 542.
 Euler, *H. von*, and Fink, *H.*, nitrogen equilibrium in the yeast-cell, *A.*, 1177.
 Euler, *H. von*, Fink, *H.*, and Nilsson, *R.*, enzymes, co-enzymes, and catalysing systems in yeast rich in coproporphyrin. I. The zymase and the oxidoreductase system, *A.*, 1176.
 Euler, *H. von*, and Hedström, *I.*, reaction velocity and equilibrium between mutameric forms, *A.*, 714.
 Euler, *H. von*, and Myrbäck, *K.*, biocatalysts concerned in carbohydrate breakdown, *A.*, 98.
 Euler, *H. von*, and Josephson, *K.*, enzymic fission of dipeptides. I. and II., *A.*, 388, 1174. inactivation of invertase by heat, *A.*, 542.
 inhibition phenomena during the enzymic hydrolysis of sucrose, *A.*, 542.
 influence of previous treatment of the yeast on the affinity constants of invertase. I., *A.*, 544.
 definition of the enzymic activity of enzymic preparations, solutions, and living cells, *A.*, 640.
 affinity of invertase. VIII. Effect of previous treatment of yeast on the affinity constant of invertase. II., *A.*, 642.
 reactions between sugars and amines. I. Reaction between dextrose and glycine, *A.*, 714.
 invertase. VI., *A.*, 865.
 affinity of invertase. X. Effect of acidity on the enzymic breakdown of sucrose, *A.*, 865.
 affinity groupings of invertase, *A.*, 865.
 Euler, *H. von*, Josephson, *K.*, and Fink, *H.*, nitrogenous equilibrium in the yeast cell and augmentation of the invertase action, *A.*, 758.
 Euler, *H. von*, and Lindstål, *I.*, vitamins. II., *A.*, 871.
 Euler, *H. von*, and Myrbäck, *K.*, biocatalysts concerned in carbohydrate metabolism. III., *A.*, 205.
 enzymic breakdown and synthesis of carbohydrates, *A.*, 431.
 Euler, *H. von*, Myrbäck, *K.*, and Karlsson, *S.*, colorimetric investigations of oils containing vitamins-*A* and -*D* and of irradiated oils, *A.*, 1181.
 Euler, *H. von*, and Nilsson, *R.*, reductase (dehydrogenase) of yeasts. I., II., and III., *A.*, 35, 323, 544.
 fermentation of galactose by yeast after preliminary treatment with this sugar, *A.*, 544.
 reductase (dehydrogenase) of yeast. IV. Purification of co-reductase, *A.*, 868.
 reversible change of hexose into lactic acid in lactic acid bacteria and in muscle. I., *A.*, 868.

Euler, *H. von*, and Olander, *A.*, oxidation-reduction potentials of organic substances, *A.*, 129.
 theory of catalysis. II. Kinetics of mutarotation. II., *A.*, 580.
 theory of catalysis. III. Inversion of sucrose by dilute hydrochloric acid, *A.*, 1108.
 Euler, *H. von*, and Pettersson, *E.*, kinetics of the fission of diketopiperazine, *A.*, 1108.
 Euler, *H. von*, and Rudberg, *K.*, solubility measurements on ampholytes, *A.*, 571*. Euler, *H. von*, and Rydholm, *M.*, accessory growth factors. VII., VIII., and IX., *A.*, 760, 1180.
 Euler, *H. von*, and Steffenburg, *S.*, accessory growth factors. VI., *A.*, 326.
 Euler, *H. von*, and Swartz, *O.*, intermediate reactions in fermentation, *A.*, 867.
 Euler, *H. von*, and Widell, *H.*, inter-relationship of vitamin effects, *A.*, 871.
 Euler, *H. von*. See also Jorpes, *E.*
 Eustis, *A. H.*, recovering sulphur dioxide [from smelting furnace gases], *(P.)*, *B.*, 359, 666*.
 Evans, *B. S.*, apparatus for continuous percolation and for filtration in neutral atmospheres, *A.*, 707.
 wet method for the determination of silver in lead, *B.*, 278.
 Evans, *B. S.*, and Clarke, *S. G.*, accurate method for the determination of mercury in solutions, *A.*, 704.
 Evans, *B. S.*, and Richards, *H. F.*, determination of zinc oxide in brass, *B.*, 279, 732*.
 Evans, *C. L.*, physiology of plain muscle. IV. Lactic acid content of plain muscle under various conditions, *A.*, 194.
 physiology of plain muscle. V. Influence of caffeine on lactic acid formation, *A.*, 1171.
 Evans, *D. C.* See Russell, *A. S.*
 Evans, *E.*, [down-draught] kilns for the manufacture of bricks and pipes, *(P.)*, *B.*, 318.
 Evans, *G. S.*, refining of iron, *(P.)*, *B.*, 832.
 Evans, *G. S.*, and Mathieson Alkali Works, desulphurising iron, *(P.)*, *B.*, 675*. purification of iron, *(P.)*, *B.*, 753.
 Evans, *G. S.* See also Mathieson Alkali Works.
 Evans, *O. B.* See Humphreys & Glasgow, Ltd.
 Evans, *R. D.* See Harris, *J. A.*
 Evans, *R. E.* See Fagan, *T. W.*
 Evans, *R. L.* See Bogert, *M. T.*
 Evans, *R. M.* and Newton, *W. L.*, hydrogen from water-gas, *B.*, 698.
 Evans, *S. M.*, producing lead oxide [from storage-battery plates], *(P.)*, *B.*, 247.
 Evans, *U. R.*, production of oxide films on copper at the ordinary temperature, *A.*, 20.
 rapid corrosion of metals by acids within capillaries, *A.*, 805.
 porosity and intensive corrosion; experiments on commercial sheet zinc and other metals, *B.*, 365.
 Evans, *W. L.*, and Buehler, *C. A.*, carbohydrate oxidation. II. Oxidation of *d*-galactose, *A.*, 149.
 Evans, *W. L.*, Buehler, *C. A.*, Looker, *C. D.*, Crawford, *R. A.*, and Holl, *C. W.*, carbohydrate oxidation. I. Dextrose, *d*-mannose, levulose, *d*- and *l*-arabinose, and *d*-glyceraldehyde, *A.*, 148.
 Evans, *W. L.*, Edgar, *R. H.*, and Hoff, *G. P.*, carbohydrate oxidation. IV. Action of potassium hydroxide on *d*-glucose and *d*-galactose, *A.*, 1228.
 Evans, *W. L.*, and Hasc, *H. B.*, carbohydrate oxidation. VI. Action of potassium hydroxide on *d*-glyceraldehyde, *A.*, 1226.
 Evans, *W. L.*, and Holl, *C. W.*, carbohydrate oxidation. III. Oxidation of the hexitols *d*-mannitol, *d*-sorbitol, and dulcitol, *A.*, 149.
 Evans, *W. L.*, and Nicoll, *W. D.*, acetone-isocetone equilibrium, *A.*, 51.
 Evans, *W. L.*, and Waring, *C. E.*, carbohydrate oxidation. V. Oxidation of dihydroxyacetone to hydroxypruvinaldehyde, *A.*, 1227.
 Evans, *W. V.*, and Aylesworth, *M. B.*, critical constants of furfuraldehyde, *A.*, 232*. Evans, *W. V.*, and Diepenhorst, *E. M.*, luminescent Grignard compounds, *A.*, 506.
 Eve, *E. W.* See Gas Light and Coke Co.
 Everest, *A. E.* See Letch, *J. W.*, & Co., Ltd.
 Evers, *F.*, caoutchouc, formula and ozoneide, *A.*, 1250.
 alteration of the degree of dispersion of rubber, *B.*, 288.
 effect of heat on mineral oils; products of decomposition of the oil by the electric arc, *B.*, 307.
 Evers, *G. V.*, [brick or pottery] kilns, *(P.)*, *B.*, 918.
 Evers, *N.*, determination of arsenic in chemicals by the electrolytic method, *B.*, 803.
 Evers, *N.* See also Caines, *C. M.*
 Ereyenoff, *G.*, electric furnace, *(P.)*, *B.*, 134, 592*.
 Ewald, *W.* See Schulz, *H.*
 Ewan, *T.*, manufacture of alkali-metal amides, *(P.)*, *B.*, 192*.
 Ewart, *F. K.*, and Raikes, *H. R.*, viscosities and densities of anhydrous methyl alcohol and of solutions of some halides of sodium and potassium in this solvent, *A.*, 1000.
 Ewart, *F. K.* See also Raikes, *H. R.*
 Ewert, effect of tar and tar vapours on the soil, *B.*, 378.
 Ewing, *J.* See Pearseal, *W. H.*
 Ewing, *S.*, light-scattering coefficient of some saturated vapours, *A.*, 230.
 Ewles, *J.*, luminescence of solids, *A.*, 455.
 Exton, *W. G.*, determination of albumin in urine, *A.*, 1184.
 Eyer, *K.* See Badische Anilin- & Soda-Fabrik, and I. G. Farbenind. A.-G.
 Eyring, *U. F.* See Millikan, *R. A.*

F.R.M. Co., Ltd. See Bendixen, *N.*
 Faber, *F.* See Drucker, *P.*
 Faber, *J. F.*, Hanina, *H. C.*, Chappell, *M. L.*, and Standard Oil Co., purifying mineral oils, *(P.)*, *B.*, 41.
 Fabre, *A. F.*, binding material for bricks, *(P.)*, *B.*, 790.
 Fabre, *R.*, application of fluorescence phenomena in biological chemistry, *A.*, 100. cholesterol allophanate, *A.*, 1283.
 Fabre, *R.*, and Penau, *H.*, rapid method of dialysis and its application to the preparation of dialysed ferrie hydroxide, *A.*, 791.
 Fabre, *R.*, and Simonet, *H.*, intoxication by sulphonal; localisation of the sulphonal and haematoxylin, *A.*, 201.
 haematoxylin. I. Optical properties and determination in Harder's gland in the white rat. II. Photo-sensitisation of red corpuscles by haematoxylin, *A.*, 750.

Fabrik Chemischer Produkte *F. Hefti*, and *Schilti, W.*, production of ammonia, sulphur, and thiosulphates, (P.), B., 322.

Fabriques Nat. de Produits Chimiques et d'Explosifs, anciennes Établissements Ghinijonet & Delaire, manufacture of ammonia and ammonium compounds from calcium cyanamide, (P.), B., 744.

Fabriques de Produits Chimiques de Thann et de Mulhouse, neutralising titanic acid obtained by hydrolytic precipitation from titanic sulphate, (P.), B., 156.

Fabry, *R. F. F.*, construction of regenerative coke-oven flues, (P.), B., 778.

Fabyan, *G.* See Page, *C. M.*

Faccioli, *G.*, and General Electric Co., Induction furnace, (P.), B., 886.

Facer, *A. W.*, *Ochna pulchra* berries, A., 981.

Fachini, *S.*, detection of olive oil obtained by extraction with solvents, B., 592. reaction of the oils containing sulphur in olive oil, B., 987.

Fakalfort-Studienes, *m.b.H.*, and Baumgarten-Crusius, *A.*, breaking up cellulosic constituents in vegetable substance for production of manure, (P.), B., 991.

Färber, *E.*, excretion of fat in urine, A., 752.

Färber, *E.* See also Goldschmidt, *T.*, *A.-G.*

Färber- & Appretures, (vorm. *A. Clavel & F. Lindenmeyer*), treatment [improving the durability] of [weighted] silk, (P.), B., 123.

Faermann, *G. P.* See Muchin, *O. E.*

Fagan, *T. W.*, variation in the moisture and nitrogen content of the potato during growth and storage, B., 846.

Fagan, *T. W.*, and Evans, *R. E.*, influence of the application of superphosphate and sodium nitrate on the chemical composition of the stem and leaf of pasture cuts of cocksfoot, B., 926.

Fahr, *G. F.*, and Swanson, *W. W.*, "effective" osmotic pressure of the plasma proteins, A., 636.

Fagan, *T. W.*, variation in the moisture and nitrogen content of the potato during growth and storage, B., 846.

Fahrens, *R.* See Sveiberg, *T.*

Fahrenheim, *H.*, relationship between the calorific value of a gas and either the oxygen necessary to burn it, or its products of combustion, B., 938.

Fahrenhorst, *G.* See Badische Anilin- & Soda-Fabrik.

Fahrkänder, *M.*, "immune" [cotton] yarn, B., 703.

Faiblebin, *M.*, reduction of aldehydes and ketones in the presence of platinum-black, A., 50, 148*.

hydrogenation of aldehydes and ketones in the presence of platinum-black; hydroxy-substituted styryl methyl ketones, A., 50.

Fairbourne, *A.*, and Foster, *G. E.*, condensations of the sodium derivatives of trimethylene glycol and glycerol, A., 144.

Fairbrother, *T. H.* See British Dyestuffs Corporation.

Fairball, *L. T.*, nutritive value of inorganic substances. I. Normal zinc metabolism with particular reference to the calcium metabolism, A., 1273.

Fairweather, *D. A.*, melting points of normal saturated dibasic acids, A., 668.

Faithfull, *S. E.*, manufacture of lactic acid, (P.), B., 252.

Faivre, *H.*, and Faivre, *P.*, recovery of lead and zinc from ores, (P.), B., 330.

Faivre, *P.* See Faivre, *H.*

Faivre, *T.* See Wahl, *A. R.*

Fajans, *K.*, and Knorr, *C. A.*, explanation in terms of atoms of the refractive data of organic compounds, A., 330.

Falck, *R.*, production of solid alcohol structure soaps, (P.), B., 21.

manufacture of oxalic acid from wood, (P.), B., 335.

material for combating plant diseases and treating seeds, (P.), B., 843.

preparation of citric and other organic acids [by fermentation], (P.), B., 853.

Falck, *R.*, and Michael, *S.*, mercuric chloride [corrosive sublimate] for timber impregnation, B., 276.

Falcke, *V.*, and Fischer, *W.*, equilibrium between carbon monoxide, carbon, and carbon dioxide, and the reactions between ferrous oxide and carbon, and between carbon monoxide and iron, A., 684.

Falek, *O.* See I. G. Farbenind. *A.-G.*

Falk, *A. H.* See Speed, *J. B.*

Falk, *I. S.*, and Reed, *C. I.*, physiological action of light. VI. Alterations in cell electrophoretic potential produced by direct irradiation of the blood *in vivo*, A., 431.

Falk, *K. G.* See Lorberblatt, *I.*, Noyes, *H. M.*, and Sharlit, *H.*

Falkenberg, *H.*, [bearing metal] alloys containing lead and tungsten, (P.), B., 368.

Falkenhansen, *M. von*, protein metabolism in experimental pancreatic diabetes, A., 89.

Falkenhause, *M. von*. See also Blittorf, *A.* and Fuchs, *H. J.*

Fall, *P. H.*, Lee, *I. E.*, and Du Pont de Nemours & Co., *E. I.*, producing naphthosulphonic acids, (P.), B., 678.

Fallon, *J.* See Smallwood, *A.*

Falqui, *P.* See Binaghi, *R.*

Faludi, *F.*, Botelho's reaction, A., 88.

Famous Players-Lasky Corporation. See Taylor, *L. E.*

Fandrich, *B.* See Korczynski, *A.*

Fanti, *See* Strassmann, *G.*

Fanti, *P.* See Fromm, *E.*

Faragher, *W. F.*, Gruse, *W. A.*, Garner, *F. H.*, and Gulf Refining Co., cracking hydrocarbon oils, (P.), B., 1003*.

Farbenfabriken vorm. *F. Bayer & Co.*, manufacture of lithopone, (P.), B., 22.

manufacture of sulphide dyes and intermediate products, (P.), B., 121.

easily soluble preparations of vat dyestuffs, (P.), B., 154.

pharmaceutical compound [1-methoxymethyl-3 : 7-dimethylxanthine], (P.), B., 216.

new dyestuffs of the pyrone series, (P.), B., 234*.

manufacture of sulphuric acid, (P.), B., 273.

automatic means for letting off steam from a container having in it a boiling liquid, (P.), B., 304.

means for running off hot liquids from a container under pressure, (P.), B., 304.

manufacture of trisazo-dyes, (P.), B., 311.

manufacture of organic mercury compounds, (P.), B., 340.

[dust] containers and means for emptying them, (P.), B., 345.

manufacture of soluble vat dyestuffs preparations, (P.), B., 357*.

improving the adhesion of spray powders to plants, (P.), B., 379.

manufacture of *n*-aminocalkylaminonaphthalene compounds and substitution products thereof, (P.), B., 433.

manufacture of alkali hydrosulphites [hyposulphites], (P.), B., 439, 915.

perfume, (P.), B., 464.

preparation of *n*-butyl salicylate, (P.), B., 464.

methods of, and means for, exterminating vermin, (P.), B., 470*.

preparation of organic derivatives of trivalent vanadium, (P.), B., 514.

manufacture of alkali salts of aromatic sulphochloroamides, (P.), B., 565.

manufacture of monoazo-dyes, (P.), B., 657.

Farbenfabriken vorm. *F. Bayer & Co.*, manufacture of colloidal organic mercury compounds soluble in water, (P.), B., 691.

production of new insoluble azo-dyestuffs in substance or on the fibre, (P.), B., 703*.

manufacture of mixtures yielding salts of sulphochloroamides, (P.), B., 774.

lacquers, impregnating materials, etc., (P.), B., 796.

manufacture of benzimidazoles, (P.), B., 850.

manufacture of colour lakes, (P.), B., 889.

manufacture of fungicidal and insecticidal media, (P.), B., 927.

manufacture of wool dyestuffs of the anthraquinone series, (P.), B., 973.

new complex alkali or alkaline-earth antimony compounds, (P.), B., 996.

Farbenfabriken vorm. *F. Bayer & Co.*, Drechsel, *S.*, and Weyland, *H.*, preparation of fats from fatty acids with an odd number of carbon atoms, (P.), B., 287.

Farbenfabriken vorm. *F. Bayer & Co.*, Duisberg, *W.*, Henrich, *W.*, and Zeh, *L.*, dyeing artificial silks manufactured from acetyl celluloses, cellulose ethers, and related products, (P.), B., 536.

Farbenfabriken vorm. *F. Bayer & Co.*, and Einsler, *O.*, automatic means for letting off steam from a container in it a boiling liquid, (P.), B., 473*.

Farbenfabriken vorm. *F. Bayer & Co.*, and Fischer, *R.*, stable vat dye printing pastes, (P.), B., 235.

Farbenfabriken vorm. *F. Bayer & Co.*, and Hahl, *H.*, pharmaceutical compound, (P.), B., 385.

Farbenfabriken vorm. *F. Bayer & Co.*, and Heller, *J.*, azo-dye, (P.), B., 432.

Farbenfabriken vorm. *F. Bayer & Co.*, and Heinze, *E.*, electrode for use in the electrolytic evolution of gases, (P.), B., 498.

Farbenfabriken vorm. *F. Bayer & Co.*, and Hencky, *K.*, regulating the temperature of superheated steam, (P.), B., 425.

Farbenfabriken vorm. *F. Bayer & Co.*, Hubert, *E.*, Leuchs, *O.*, and Lock, *L.*, preparation of threads from cellulose acetate, (P.), B., 483*.

Farbenfabriken vorm. *F. Bayer & Co.*, Keler, *H. von*, and Drucker, *J.*, magnesia cement, (P.), B., 276.

Farbenfabriken vorm. *F. Bayer & Co.*, and Kropp, *W.*, preparation of *C*-benzyl-naphthols, (P.), B., 611.

Farbenfabriken vorm. *F. Bayer & Co.*, Kropp, *W.*, Schranz, *W.*, and Schulemann, *W.*, *o*-benzylphenol, (P.), B., 435*.

Farbenfabriken vorm. *F. Bayer & Co.*, Lommel, *W.*, and Müntzel, *H.*, protecting wool, fur, and other materials, (P.), B., 49*.

Farbenfabriken vorm. *F. Bayer & Co.*, and Meerwein, *H.*, production of alcohols from halogenated aldehydes, (P.), B., 386*.

manufacture of halogenated alcohols, (P.), B., 645.

Farbenfabriken vorm. *F. Bayer & Co.*, and Rudolph, *G.*, production of effect threads from animal fibres, (P.), B., 318.

manufacture of effect threads, (P.), B., 537.

Farbenfabriken vorm. *F. Bayer & Co.*, and Schmidt, *R. E.*, preparation of 1 : 2 : 3 : 4-tetrahydroxyanthraquinone, (P.), B., 312.

Farbenfabriken vorm. *F. Bayer & Co.*, and Stroder, *E.*, apparatus for intimately mixing gases and liquids, (P.), B., 696*.

Farbenfabriken vorm. *F. Bayer & Co.*, and Stüsser, *R.*, azo-dyestuff, (P.), B., 8.

Farbenfabriken vorm. *F. Bayer & Co.*, Taub, *L.*, Wingler, *A.*, and Schulemann, *W.*, preparation of rhodinol, (P.), B., 771.

Farbenfabriken vorm. *F. Bayer & Co.*, and Zieser, *W.*, vulcanisation of rubber at low temperatures, (P.), B., 599.

Farbenfabriken vorm. *F. Bayer & Co.* See also I. G. Farbenind. *A.-G.*

Farber, *C. W.* See Breyer, *F. G.*

Farbwerke vorm. Meister, *Lucius*, & Brüning, manufacture of finely-divided pigment dyes, (P.), B., 7.

manufacture of 1 : 4 : 5 : 8-naphthalaceturiccarboxylic acid and its derivatives, (P.), B., 7.

water-soluble complex bismuth compound of 7-iodo-8-hydroxyquinoline-5-sulphonic acid, (P.), B., 28.

manufacture of condensation products [dyestuffs] of the anthraquinone series, (P.), B., 44, 148, 311.

preparation of oily and resinous condensation products, (P.), B., 100.

preparation of copper liquors for combating vine-pests, (P.), B., 103.

manufacture of alkamine esters of *N*-substituted *p*-aminobenzoic acids, (P.), B., 107.

[manufacture of] greenish-blue dyestuffs, lakes, (P.), B., 149, 355*.

manufacture of azo-dyestuffs, (P.), B., 150*.

removing part of the contents of autoclaves [while working], (P.), B., 177.

material for combating plant pests, (P.), B., 209.

mixtures containing finely divided copper compounds for combating plant pests, (P.), B., 209.

preparation of mercury derivatives of organic compounds, (P.), B., 218.

preparation of 1-phenyl-2 : 3-dimethyl-1-dimethylamino-5-pyrazolone, (P.), B., 218.

vat dyes, (P.), B., 266, 480*.

mechanical salt-cake furnaces, (P.), B., 273, 360*.

manufacture of triazolo-dyestuffs, (P.), B., 528*.

manufacture of 2-aminonaphthalene-1-carboxylic acid or its nucleic substitution products, (P.), B., 626*.

manufacture of vat-dyestuffs of the perylene series, (P.), B., 626*.

dyeing cellulose esters and ethers, (P.), B., 628.

apparatus for subjecting gases or vapours to the absorptive action of solids, (P.), B., 696*.

manufacture of indigo-dyestuffs containing sulphur, (P.), B., 703.

arylidonanthraquinone derivatives, (P.), B., 866.

preparation of calcium nitrate capable of being strewn, (P.), B., 926.

Farbwerke vorm. Meister, *Lucius*, & Brüning, Bockmühl, *M.*, and Schwarz, *A.*, manufacture of *N*-methylsulphites of secondary aromatic-aliphatic amines, (P.), B., 141.

Farbwerke vorm. Meister, *Lucius*, & Brüning, and Daimler, *K.*, process for brightening dark tannages, (P.), B., 716.

preparation of chromium oxide compounds [for tanning], (P.), B., 762.

Farbwerke vorm. Meister, *Lucius*, & Brüning, Ernst, *O.*, and Sponsel, *R.*, preparation of esters of formic acid, (P.), B., 513.

Farbwerke vorm. Meister, *Lucius*, & Brüning, and Henninger, *G.*, apparatus for taking samples from closed vacuum or pressure vessels, (P.), B., 473.

Farbwerke vorm. Meister, *Lucius*, & Brüning, Kränlein, *G.*, and Corell, *M.*, process of preparing propylmethiohydron or propylene-ethylmethiohydron, (P.), B., 218.

Farbwerke vorm. Meister, *Lucius*, & Brüning, Kränlein, *G.*, Voss, *A.*, and Görtner, *H.*, tanning substances, (P.), B., 558.

Farbwerke vorm. Meister, *Lucius*, & Brüning, Läutenschläger, *L.*, and Bockmühl, *M.*, preparation of water-, alcohol-, and oil-soluble tuberculin preparations, (P.), B., 109.

Farbwerke vorm. Meister, Lucius, & Brüning, Läutenschläger, L., Streitwolf, K., and Fehrl, A., preparation of derivatives of aromatic arseno-compounds and their complex metal compounds, (P.), B., 770.

Farbwerke vorm. Meister, Lucius, & Brüning, Leopold, R., and Michael, A., preparation of solutions of organic substances such as cellulose esters, resin dyes, caoutchouc, etc., (P.), B., 248.

Farbwerke vorm. Meister, Lucius, & Brüning, and Marschall, F., preparation of oily and resinous condensation products from aromatic hydrocarbons and aralkyl halides, (P.), B., 203.

Farbwerke vorm. Meister, Lucius, & Brüning, and Mayer, F., preparation of 2-aminonaphthalene-1-carboxylic acid and its nuclear substitution products, (P.), B., 355.

Farbwerke vorm. Meister, Lucius, & Brüning, Nicodemus, O., and Wulf, O., manufacture of methyl alcohol by the hydrolysis of methyl chloride, (P.), B., 610.

Farbwerke vorm. Meister, Lucius, & Brüning, and Roth, P., motor fuel, (P.), B., 263.

Farbwerke vorm. Meister, Lucius, & Brüning, Schirmacher, K., and Zahn, K., preparation of hydroxy-compounds [dyes] of the dibenzanthrone series, (P.), B., 234.

Farbwerke vorm. Meister, Lucius, & Brüning, Schmidt, Albrecht, Steindorff, A., Fluss, A., and Schaffrath, O., process for treating seed grain, (P.), B., 559.

Farbwerke vorm. Meister, Lucius, & Brüning, Steindorff, A., Pfaff, K., and Meyer, H., material for combating pests, (P.), B., 103.

Farbwerke vorm. Meister, Lucius, & Brüning, Stoltz, F., and Böttcher, K., preparation of a derivative of 1-phenyl-2:3-dimethyl-pyrazolone, (P.), B., 611.

Farbwerke vorm. Meister, Lucius, & Brüning, Streitwolf, K., and Fehrl, A., preparation of 5(?)-nitro-3-amino-6-hydroxyacetophenone, (P.), B., 85.

Farbwerke vorm. Meister, Lucius, & Brüning, Tiedtke, R., and Benz, J., charcoal absorption apparatus, (P.), B., 425.

Farbwerke vorm. Meister, Lucius, & Brüning, and Voss, A., preparation of artificial resins, (P.), B., 502.

production of water-soluble, sulphonated condensation products [tanning agents] from aldehydes and aromatic hydrocarbons and their derivatives, (P.), B., 600.

Farbwerke vorm. Meister, Lucius, & Brüning. See also Badische Anilin- & Soda-Fabrik.

Fargher, R. G., and Higginbotham, (Miss) L., chemical analysis of cotton. XIII. Scouring losses, B., 629.

Fargher, R. G., and Probert, M. E., chemical analysis of cotton; ash content and ash alkalinity of typical cottons, B., 186.

Farish, W. A., refractory composition, (P.), B., 586.

Farkas, G., and Tangl, H., behaviour of dyes in the blood of splenectomised dogs, A., 1269.

Farmakides, N. M. See Müller, Robert.

Farmer, E. H., and Kracovski, J., electrolytic synthesis of tetramethyladipic acids, A., 1124.

Farmer, E. H., and Richardson, H. L., glutaconic acids. XX. Tetrahydroisophthalic acid, A., 1039.

Farmer, E. H., and Ross, J., formation and stability of associated alicyclic systems. II. Formation and disruption of dicyclic dihydrosorcinols, A., 66; properties of conjugated compounds, I. Conjugative associations in extended "conjugated systems," A., 834.

Farmer, W., and Firth, J. B., production of arsenic subsulphide; reduction of certain arsenic compounds by sodium hyposulphite, A., 256.

Farncomb, F. J., initiation of bubbles in supersaturated solutions of gases, A., 18.

Farnell, R. G. W., precipitation of calcium sulphite under various conditions, with special reference to sugar factories, B., 72.

precipitation of calcium phosphate under various conditions, with special reference to sugar factories, B., 927.

Farnsworth, H. E., secondary electrons from iron, A., 552.

Farnsworth, M., manufacturing gypsum from anhydrite, (P.), B., 126.

Farnworth, F. See Calico Printers' Association, Ltd.

Farrow, E. S. jun., and Eastman Kodak Co., treating cellulose acetate, (P.), B., 10.

treating cellulose acetate reaction mixtures, (P.), B., 48.

Farrow, (Miss) M., solubilities of sodium, potassium, and calcium ferrocyanides, A., 236.

Farrow, M. D., and Kon, G. A. R., three-carbon system. VI. Systems containing the benzoyl group, A., 1040.

Farup, P., catalytic action of iron ores in decomposing carbon monoxide, B., 490.

Farp, P., and Norsk Hydro-Elektrisk Kvelstof-A.-S., reduction of iron ore, (P.), B., 368.

Fasold, H. See Hahn, A.

Fassotte, A. D. H. L., and Compagnie des Métaux Overpelt-Lommel, roasting ores, (P.), B., 97.

Fast, J. D. See De Boer, J. H.

Fasting, J. S., rotary drums for cooling or otherwise treating materials by air currents, (P.), B., 520.

Faulkner, I. J., and Lowry, T. M., dynamic isomerism. XXII. Methyl alcohol as an amphoteric solvent for the mutarotation of the sugars, A., 1026.

Faulkner, I. J. See also Lowry, T. M.

Fauque, L., carbonisation of wood, B., 970.

Faußer, G. See "Montecatini" Soc. Gen. per l'Ind. Min. ed Agric.

Faust, E. S. See Soc. of Chem. Ind. in Basle.

Faust, J. B., production of iodine in Chile, B., 821.

Faust, O., equal viscosities, A., 343.

surface tension, A., 674.

preparation of concentrated colloidal arsenious sulphide solution, (P.), B., 360.

swelling of cotton cellulose in sodium and potassium hydroxides of different concentrations, B., 1007.

swelling of sulphate cellulose in sodium and potassium hydroxides at different temperatures, B., 1007.

Faust, O., and Kämpf, A., artificial silk, thread, films, ribbons, etc., from viscose, (P.), B., 913.

Favorski, A. E., [with Venus-Danilova, (Mme.) E., Vassiliev, M., Umnova (Mlle.), A., and Kotchergina, E.] molecular transformations of α -keto-alcohols, A., 500.

Favoraki, A. E., and Tchilingaren, A., dehydration of α -glycols; molecular transformations from ketones to ketones, A., 272.

Favorski, A. E., and Zaleski-Khardine, (Mme.) J., dehydration of primary alcohols containing tertiary radicals, A., 45.

Favre, C., process for dyeing woollen piece goods evenly; process for printing woollen piece goods by means of direct dyestuffs without steaming, B., 122.

crêpe effects on delaines, B., 123.

Favrel, and Jean, C. H. R. Z., action of ethyl acetopyruvate on diazonium hydroxides, A., 48.

Fay, H., absorption of moisture by various fibres under different atmospheric conditions, B., 578.

Fay, M., strontium as a source of error in blood-calcium determinations, A., 872.

Fay, M., and Mendel, L. B., nitrogen and sulphur metabolism in the dog, A., 318.

Fay, M. See also Hendrix, B. M.

Fazekas, E. von, Haagendorf's blood-sugar method, A., 443.

Fekete, E. von, ketonic substances of the blood, A., 536.

Fear, C. M., and Menzies, R. C., application of thallium compounds in organic chemistry. III. Alkylation, A., 604.

Fearon, W. R., biochemical colour test. III. Colour reactions associated with vitamin-1, A., 207.

Fearon, W. R., and Dockeray, G. C., hydrolysis of cyanic acid, A., 506.

Federal Phosphorus Co. See Klugh, B. G.

Federated Engineers Development Corporation, temperature-sensitive fusible elements, (P.), B., 33.

Fenstra, T. P. See Zwardemaker, H.

Fehér, D., and Vágó, S., action of sodium carbonate on germination and growth in plants. II, A., 1066.

action of nitrites on the growth of plants, A., 1066.

Fehlmann, F. See Rupe, H.

Fehnel, J. W. See Batchelor, R. P.

Fehrl, A. See Farbwerke vorm. Meister, Lucius, & Brüning.

Fehlmann, R., bleaching artificial silk with "aktivin" [sodium *p*-toluenesulphochloramide], J., 483.

use of "aktivin" for finishing printed fabrics and window-curtain materials, B., 484.

Feichtinger, N. See Hahn, O.

Feick, R., polychrome mercury hydrosols, A., 22.

Feick, R., and Schaum, K., nature of the photohalides and related substances, A., 341.

Feigl, F., and Pollak, I., microchemical determination of silver, A., 1222.

Feigl, F., Sicher, S., and Singer, O., affinity of the group, $\text{C}(\text{OH})\text{C}(\text{N}-\text{OH})\text{Y}$, for copper; relationship between atomic grouping and specific affinity, A., 70.

Feld, A. L., physico-chemical phenomena from melt to ingot, B., 367.

Fellner, A. See Rosenhauer, E.

Feirer, W. A., and Leonard, V., stability of hexylresorcinol in pharmaceutical preparations, B., 963.

Feist, F., [with Pauschardt, H., and Dibbern, H.], transformation of ethyl benzoylacetate by concentrated and fuming sulphuric acid, A., 74.

Feist, A., and Awe, W., 4: 5: 6-trimethoxybenzene-1: 3-dicarboxylic acid, A., 404.

Feitknecht, W., crystal growth in recrystallised cold-worked metals, B., 366, 792*.

Feld, G., fusion of alumina with soda [sodium carbonate], B., 273.

Feldenheimer, W., purifying clays and improving their colour, (P.), B., 55, 667*.

treatment of earthy minerals, (P.), B., 274*.

Feldmeier, H., and Burrell, D. H., & Co., Inc., centrifugal separating machine, (P.), B., 999.

Felix, K., and Harteneck, A., constitution of the histone of the thymus gland. II. Combining capacity with acids and bases, A., 1167.

Felix, K., and Waldschmidt, E., specific nature of animal proteases. VII. Chemical nature of insulin, A., 1278.

Filizat, G. See David, L. F.

Fellenberg, T. von, iodine storage in individual organs, A., 1052.

iodine metabolism. II, A., 1056.

iodised salt. III, A., 1112.

Fellenberg, T. von, and Lunde, G., occurrence of iodine in Nature. X. Geochemistry of iodine, A., 1022.

Fellner, O., separation of lipoids from ovaries and similar human or animal organs, (P.), B., 341.

Fells, H. A., and Firth, J. B., change of crystal structure of some salts when crystallised from silicic acid gel; structure of silicic acid gel, A., 995.

Felsing, W. A. See McAmis, A. J., and Stiles, A. G.

Felten & Guilleaume Carlswerk Akt.-Ges., spectroscopic testing of the metal bath in refining of iron in the electric furnace, (P.), B., 329.

Feniger, M. See Fromm, E.

Fenning, R. W., gaseous combustion at medium pressures. I. Carbon monoxide-air explosions in a closed vessel. II. Methane-air explosions in a closed vessel, B., 258.

Femo-Gesellschaft für Energieverwertung, and Mewes, R. F., production of high-pressure nitrogen for ammonia synthesis, (P.), B., 744.

Fenwick, (Mts) F., equilibrium between cupric ion, cuprous ion, and metallic copper, A., 577.

Ferenczy, J. See Bodnár, J.

Ferguson, A., reducing ores and producing cement, (P.), B., 134*.

Ferguson, A., and Vogel, I., hyperbola method for the measurement of surface tensions, A., 573.

Ferguson, J. B., equilibrium in systems involving ferrous oxide, B., 367*.

electrical resistance of refractory materials, B., 824.

Ferguson, J. B., and Ellis, O. W., photomicrographic study of the evolution and disappearance of gas during the passage of electricity through glass, A., 31.

Ferguson, J. E. See Whitmore, J. B.

Fermi, E., quantisation of the perfect monatomic gas, A., 555, 657.

Fernandes, L., sensitive differential reaction of cerium, A., 140.

co-ordination valency of two hydroxyl groups in the *ortho*-position. II. Complexes of hydroxyquinol, 1: 2-dihydroxynaphthalene, and protocatechuic-aldehyde with acids of the molybdenum group, A., 1036.

Fernandes, L. See also Rolla, L.

Fernández, J. M. See Fernández, O.

Fernández, O., and Fernández, J. M., acetylation of tannin and analysis of commercial acetyl-tannins, B., 401.

Fernández, O., and Garmendia, T., production of oxydases, A., 1275.

Fernau, A., effect of irradiation with radium on serum- and egg-albumin, A., 367.

Fernbach, A., brewing in its relations with other fermentation industries, B., 961.

Ferngren, E. T., and Libby-Owens Sheet Glass Co., continuous [glass] tank furnace, (P.), B., 542.

Fernholz, E., and Fernholz Machinery Co., block or briquette of lignite, (P.), B., 425.

Fernholz Machinery Co. See Fernholz, E.

Ferrari, A., crystal structure of the fluorides of certain bivalent metals: anhydrous FeF_3 , CoF_3 , NiF_3 , and ZnF_2 , A., 664.

X-ray investigation of the crystal lattices of manganous fluoride and manganese dioxide, A., 664.

Ferrari, A., comparison between the diameters of ions of the same element having different charges, A., 781.

Ferrari, A. See also Bruni, G.

Ferrari, G., determination of lead tetraethyl in motor fuels, B., 181.

Ferrero, A. See Briner, E.

Ferrey, G. J. W., analysis and composition of commercial glycerophosphates, B., 803.

Ferrier, E. See Cumming, W. M.

Ferris, S. W. See Hill, J. B., and Peterkin, A. G.

Féry, C., recent improvements in the lead accumulator, B., 412.

Féry, C., and Chéneau, C., secondary reaction in the lead accumulator, B., 407.

Feske, E. See Borsche, W.

Fessia, F., recovery of lead compounds from old accumulators, (P.), B., 794.

Fetter, G., and Maidana, G., producing cellulose from bamboo, B., 267.

Fetkenheuer, B. See Siemens & Halske, A.-G.

Fiechter, H., problems of vulcanisation. IV. Shell aggregation and colloidal crystallisation of caoutchouc, B., 100.

Fiechter, H., hysteresis and its significance for the colloid structure of rubber, B., 201.

relative rate of oxidation of monophase caoutchouc gel and of raw rubber, B., 204.

vulcanisation of "diffusion-caoutchouc" B., 555.

Ficher, A., chemical composition of the separative septa of the lemon, B., 171.

Fidot & Cie, J., Successeurs. See Malson Bretot.

Fichter, F., electrochemical oxidation and peroxides, A., 807.

Loebel's method for the determination of perchloric acid, A., 813.

electrochemical oxidation of organic substances, A., 912.

Fichter, F., and Adler, M., electrochemical oxidation of aromatic hydrocarbons containing nuclear chlorine, A., 509.

Fichter, F., and Erlenmeyer, H., thermal decomposition of unsymmetrical diacyl peroxides, A., 500.

Fichter, F., and Humpert, K., oxidation with fluorine. II. Preparation of ammonium persulphate. III. Action of fluorine on dry hydrogen sulphates and sulphates, A., 609.

oxidation with fluorine. IV. Qualitative and quantitative investigation of the reaction between fluorine and normal and acid sulphate solutions, A., 925.

oxidation with fluorine. V. Action of fluorine on alkali acetates and Kolbe's synthesis of hydrocarbons, A., 926.

Fichter, F., and Kern, W., reduction of caffeine and theobromine to the deoxy compounds, A., 531.

electrochemical oxidation in the purine group, A., 742.

Fick, R. See Badische Anilin- & Soda-Fabrik.

Fiedler, C., melting magnesite-sand, (P.), B., 275.

Fiehe, J., composition of the "frothy layer" in honey, B., 1027.

Field, J., and Baas-Becking, L. G. M., light titrations. I. Starch-iodine reaction, A., 690.

Field, J. See also Alberg, C. L., and Huggins, M. L.

Field, S., Peterson, F., Harris, W. E., and Metals Extraction Corporation, Ltd., electrolytic production of zinc from ores, (P.), B., 495.

Fielding, W. R., fertilisers, (P.), B., 684.

Fieldner, A. C., low-temperature carbonisation of coal. I.—III., B., 859.

Fieldner, A. C., Jones, G. W., and Holbrook, W. F., [U.S.] Bureau of Mines Orsat apparatus for gas analysis, B., 306.

Fieldner, A. C., and Selvig, W. A., fusibility of coal ash, B., 115.

Fieldner, A. C. See also Sayers, R. R.

Fierz-David, H. E., and Hannig, M., distillation of cellulose, wood, and similar materials in the presence of hydrogen under pressure and catalysts, B., 35.

Fieschi, F. See Deriveau, P.

Fieser, L. F., comparison of heterocyclic systems with benzene. I. 6 : 7-Indazole-quinone-4-sulphonic acid, A., 626.

Fife, J. M., effect of sulphur on the microflora of the soil, B., 600.

Fidgor, W., application of micro-methods to control work in pharmaceutical manufacturing, B., 383.

Fidgor, W. See also Klarmann, E.

Figour, H., graduated gauge for the measurement of small volumes of gases, A., 1223.

Fikentscher, H. See Meyer, K. H., and Weinland, R.

Filippo, J. D., and Adriani, W., loss of chlorine in the incineration of foodstuffs, B., 847.

Filosofov, M. S., causes of errors in saccharimetric analysis, B., 1025.

Finch, G. I., and Cowen, L. G., gaseous combustion in electric discharges. I. Combustion of electrolytic gas in direct current discharges, A., 690.

Finch, G. I., and Fraser, R. P., purification of phosphoric oxide, A., 280.

Finch, G. I., and Karim, A., rapid method for determining reaction velocity in soap boiling, B., 166.

Finch, G. I. See also Chatterji, N. G.

Finch, M. W. See Youngberg, G. E.

Finck, E. See Schroeter, G.

Fincke, H., cacao beans and cacao products. III., B., 73.

polarimetric determination of sucrose and its mixtures with lactose and other sugars, in cacao products, condensed milk, and sugar products, B., 252.

determination of milk fat and coconut oil in fat mixtures and examination of milk sweets, B., 836.

Findlay, A., and Cruickshank, J., reciprocal salt pair ($\text{Na}_2\text{Ba}_2\text{Cl}_2\text{NO}_3$) in aqueous solution at 20°, A., 358.

Fink, C. G., and Chemical Treatment Co., Inc., electrodepositing chromium and preparing baths therefor, (P.), B., 543.

Fink, C. G., and Pan, L. C., insoluble anodes for the electrolyses of brine, B., 497.

Fink, C. G., and Philipp, C. A., voltage in copper refining cells, B., 950.

Fink, G. J., McCormick, J. A., and Cabell, C. A., cementitious compositions, (P.), B., 1015.

Fink, H. See Euler, H. von, and Fischer, Hans.

Fink, W. L., and Campbell, E. D., influence of heat treatment and carbon content on the structure of pure iron-carbon alloys, B., 919.

Finkelstein, B. See Frenkel, J.

Finkelstein, W., system, benzene-dibromine, A., 682.

Finlay, H. J., New Zealand pepper-plant, A., 931.

Finlayson, T. C. See Smith, E. W., and Woodall-Duckham (1920), Ltd.

Finn, A. N. See Coblenz, W. W.

Finn, (Miss) J. L. See Drinker, P.

Finney, W. H. See Cassidy, G. J.

Finow-G.m.b.H., and Müller, Hans, preparation of primary aromatic amines, (P.), B., 149.

Finzi, C., arsenical derivatives of thiophene. III., A., 186.

heterocyclic derivatives of thiobenzoindolopropionic acid, A., 1255.

Finzi, C., and Accarini, D., salts and derivatives of phenolphthalin, A., 1140.

Finzi, C., and Pagliari, L., thiazinc derivatives of nitro-2 : 4-phenylenedithio-glycolic acid. II., A., 309.

nitro-derivatives of thiobenzoindol ethers, A., 948.

Finzi, F., alkali silicate powder, (P.), B., 320.

Flock, E. F., and Rodebush, W. H., vapour pressures and thermal properties of potassium and some alkali halides, A., 1193.

Fireman, P., oxidation of metallic iron by a current of air in presence of iron salts, B., 373.

Fistone Steel Products Co. See Swain, J. G.

Fistone Tire and Rubber Co. See Shepard, N. A.

Firzau, H. See Schlubach, H. H.

Firth, E. M., Hodkin, F. W., Muirhead, C. M., Parkin, M., and Turner, W. E. S., effects of chlorides on the melting and working properties of potash-lead oxide-silica glass, B., 745.

Firth, E. M., Hodkin, F. W., Parkin, M., and Turner, W. E. S., function of arsenic in soda-lime-silica glasses. I., B., 685.

influence of water on the rate of melting and the working characteristics of soda-lime-silica glass, B., 745.

Firth, E. M., Hodkin, F. W., and Turner, W. E. S., production of opalescence by chlorides in potash-lead oxide-silica glasses, B., 745.

Firth, F., corrosion in gas meters, B., 474.

Firth, J. B., and Purse, W. L., organogels of silicic acid; replacement of water in the hydrogel by alcohol, A., 676.

Firth, J. B. See also Farmer, W., and Fells, H. A.

Fisbeck, K., tarnishing of copper in sulphur vapour, A., 692.

Fischer, A., determination of the fatty acid content of organs, A., 1283.

Fischer, E. See Eichwede, H.

Fischer, Ernst, solvatochromism, A., 949.

Fischer, E. J., action of aliphatic and cyclic bases on salts of the metals, A., 492.

Fischer, F., recent investigations on the origin of coal, B., 393.

coal research [oxidation and reduction], B., 565.

[apparatus for use in the] production of hydrocarbons from phenols, (P.), B., 865.

Fischer, F., and Dilthey, P., removal of carbon dioxide from industrial gases by washing [with water] at ordinary pressure, B., 906.

direct recovery of pure sulphur from gases containing hydrogen sulphide by means of solutions of copper salts, B., 938.

Fischer, F., and Jaeger, A., reduction of carbon monoxide by hydrogen in contact with a heated iron spiral in a hot-cold tube, B., 777.

Fischer, F., and Tropsch, H., reduction of cresols by the Bergius process, B., 148.

synthesis of petroleum at atmospheric pressure from products of coal gasification, B., 475.

comparative distillations of cellulose, lignin, and deresinified wood under diminished pressure, B., 859.

action of steam and hydrogen on iron sulphide, B., 874.

reduction and hydrogenation of carbon monoxide, B., 939.

Fischer, F. A. See Fricke, R.

Fischer, F. G., and Wagner, C., oxidising action of iodic acid and its restriction, A., 1215.

Fischer, F. G. See also Wieland, H.

Fischer, H., compounds of diphenylthiocarbazone with metals and their use in analysis, A., 491.

Fischer, Hans, synthesis of coproporphyrin by yeast, A., 454.

[porphyrins in urine], A., 558.

Fischer, Hans, and Andersag, H., porphyrin syntheses. VIII. Synthesis of copro- and tocopro-porphyrins, A., 1261.

Fischer, Hans, and Ernst, P., action of pyridine and cyanogen bromide on certain pyrroles, A., 411.

synthesis of α -pyrrole-aldehydes and stable tripyrrylmethanes, A., 621.

Fischer, Hans, and Fink, H., synthesis of coproporphyrin by yeast. III. Coproporphyrin ester from pure cultures of *Saccharomyces anomensis*, A., 324.

Fischer, Hans, and Halbig, P., syntheses of α -unsubstituted dipyrrolyl-ethanes [carboxylic acids], and α -methanes, and pyrrolealdehydes; dialdehydes of bimolecular pyrroles, A., 621.

synthesis of tocotroporphyrin, its "haemlin," and its "phylillin," A., 963.

porphyrin syntheses. IV. α -Tocotroporphyrin, its tetrabromide, and its degradation by oxidation and by reduction; synthesis of isomesoporphyrin and opsonopyrrole, A., 1256.

Fischer, Hans, and Hilger, J., naturally occurring porphyrins. XVII. Transformation of uroporphyrin into coproporphyrin, and certain derivatives of these porphyrins, A., 189.

Fischer, Hans, and Hilmer, H., synthesis of coproporphyrin by yeast. IV., A., 768.

Fischer, Hans, Hilmer, H., Lindner, F., and Pütz, B., naturally-occurring porphyrins. XVIII. Chemical findings in a case of porphyrinuria, A., 196.

Fischer, Hans, and Klarer, J., synthesis of tetra-(4-methyl-2-ethyl-3-propionyl-pyrryl)ethylene and of xanthopyrrolecarboxylic acid, and transformations of some pyrroles, A., 412.

synthesis of atioporphyrin, retiophemmin, and atiophyllin, A., 962.

porphyrin syntheses. VII. α -Tocotroporphyrin from cryptopyrrole and hemopyrrole; synthesis of hemopyrrole, A., 1261.

Fischer, Hans, and Lindner, F., decomposition of blood pigment by yeast, A., 634.

Fischer, Hans, and Müller, Richard, mercury and arsenic compounds of pyrroles, A., 75.

Fischer, Hans, and Nenitzescu, C., synthesis of carboxylated cryptopyrrolecarboxylic acids, etc., A., 178.

Fischer, Hans, and Postawsky, J. J., determination of active hydrogen in haem, bilirubin, in some of their derivatives, and in pyrroles, A., 630.

Fischer, Hans, and Pütz, B., naturally occurring porphyrins. XIX. Transformation of haem in protoporphyrin; preparation of mesoporphyrin, A., 834.

Fischer, Hans, and Schubert, F., ethyl 2-methylpyrrole-3-carboxylate, its conversion into a stable tripyrrylmethane and tetrapyrrolyl methane, and other syntheses, A., 736.

Friedel-Crafts syntheses of pyrrol ketones, A., 737.

Fischer, Hans, and Schwerdtel, F., naturally occurring porphyrins. XX. Porphyrins in plants, A., 1280.

Fischer, *Hans*, and Stern, *A.*, substituted pyrrolcalcohols, pyrrolealdehydes, and aminopyrrole, *A.*, 303.

Fischer, *Hans*, and Treibs, *A.*, cholesterol, *A.*, 399.

porphyrin syntheses. III. Degradation of blood-pigments and resynthesis of porphyrins from opsonopyrrole and opsonopyrrolecarboxylic acid, *A.*, 1256.

Fischer, *Hans*, and Walach, *B.*, synthesis of ethyl 2:4-dimethyl-3-vinylpyrrole-5-carboxylate and its conversion into cryptopyrrole, *A.*, 178.

synthesis of 2:4-dimethyl-5-ethylpyrrole-3-propionic acid, *A.*, 411.

halogenated pyrroles. VII. 2:3:4-Trimethylpyrrole and its conversion into methenes and brominated methenes; synthesis of 3:4-dimethylpyrrole, *A.*, 1236.

porphyrin syntheses. VI. Synthesis of octamethylporphin, the methyl analogue of tetroporphyrin, *A.*, 1261.

Fischer, *Hans*, and Wiedemann, *O.*, some transformations of ethyl 3-methylpyrrole-4-carboxylate, *A.*, 736.

Fischer, *Hermann*, bacterial oxidation of sulphur in pond deposits and its practical importance, *B.*, 71.

Fischer, *Hermann* (Zehlendorf), manufacture of acid-resistant iron-silicon alloys, (*F.*), *B.*, 547.

Fischer, *H. O. L.*, and Taube, *C.*, methylglyoxal, *II.*, *A.*, 599.

Fischer, *H. O. L.*, and Taube, *C.*, [with Kuhn, *B.*], glyoxal, *A.*, 599.

Fischer, *Karl*, See Ehrenberg, *C.*

Fischer, *Karl* (Leipzig), sols of caoutchouc nitrosito-nitrosate, *B.*, 838.

Fischer, *M. H.*, and Hoeker, *M. O.*, electrical resistance of protein-water systems, *A.*, 1907.

Fischer, *P.*, electrical conductivity of solid salt mixtures, *A.*, 478.

Fischer, *R.*, See Farbenfabr. vorm. *F. Bayer & Co.*, and Weitz, *P.*

Fischer, *W.* See Flacke, *V.*, and Scheibe, *G.*

Fischer, *W. M.*, [with Steikman, *A.*, and Dombrowski, *A.*], supersaturated solutions. II. Magnesium oxalate and the oxalate separation of calcium and magnesium, *A.*, 703.

Fischer, *W. M.*, and Schmidt, *Arrid*, determination of alcohols. II. Determination of ethyl alcohol and its homologues and their separation from other substances, *A.*, 632.

Fischl, *V.* See John, *H.*

Fischler, *F.*, sugar in the organism. I. Breakdown of sugar under the action of dilute alkalies, *A.*, 1170.

Fischer, *J.*, chemistry of the lead chamber [sulphuric acid] process, *B.*, 189.

Fiser, *J.* See Linsbauer, *A.*

Fish, *F. K.*, jun., recovering by-products from plant substance, etc., (*P.*), *B.*, 596.

process of treating plant material; process and apparatus for making pulp, (*P.*), *B.*, 871.

Fish, *F. K.*, jun., and Wood Products and By-Products Corporation, making paper pulp, (*P.*), *B.*, 580.

Fisher, *B. C.* See Raiziss, *G.*

Fisher, *D. T.*, and Read, *A. M.*, pulverising machine, (*P.*), *B.*, 648.

Fisher, *H. L.*, and Gray, *A. E.*, chemical unsaturation of rubber under the action of heat, trichloroacetic acid, ultra-violet light, and mastication, *B.*, 503.

Fisher, *H. L.*, Gray, *H.*, and McColm, *E. M.*, dihydroxydiphenyleaoutchouc and its dimethyl ether, *A.*, 730.

Fisher, *M. S.* See Andrew, *J. H.*

Fisher, *N. F.* See McKinley, *E. B.*

Fisher, *W. H.*, and Chambers, *P.*, apparatus [furnaces] for use in the cementation of iron or iron alloys, (*P.*), *B.*, 675*.

Fisk Rubber Co. See Fuller, *E. W.*

Fiske, *A. H.*, and Rumford Chemical Works, yeast assistant [for making bread], (*P.*), *B.*, 1027.

Fiske, *C. H.*, and Boyden, *E. A.*, nitrogenous metabolism in the chick embryo, *A.*, 1268.

Fiske, *C. H.*, Goodell, *R. A.*, Hathaway, *L. R.*, jun., and West, *E. J.*, fate of acid in the body, *A.*, 539.

Fiske, *C. H.*, and Subbarow, *Y.*, colorimetric determination of phosphorus, *A.*, 443.

Fitch, *J. B.* See Titus, *R. W.*

Fitzgerald, *F. A. J.*, application of recrystallised silicon carbide, *B.*, 947.

Fitzgerald, *F. W. V.*, hydration of concrete and other similar materials, (*P.*), *B.*, 981.

Fitzner, *O.* See Wartenberg, *H. von*.

Fjellanger, *M.* See Cederberg, *I. W.*

Flach, *J.*, preserving fruits, vegetables, and the like, (*P.*), *B.*, 213.

Flachsäender, *J.*, Burgess, *L. J.*, and Du Pont de Nemours & Co., *E. I.*, brown copper-containing aromatic amine-sulphur dyes and process of making them, (*P.*), *B.*, 578.

Flanz, *See* Semichon, *L.*

Flaschenträger, *B.*, organic micro-analysis, *A.*, 853.

Flatow, *L.*, urico-oxydase of blood and the true uric acid content of the blood, *A.*, 1166.

determination of uric acid in blood, *A.*, 1283.

Flechsig, *W.*, absorption of light in coloured alkali halides, *A.*, 658.

Fleck, *H.*, and Bell, *W. A. J.*, extracting radium from radium-barium salts, (*P.*), *B.*, 743.

Fleck, *H.*, and Haldane, *W. G.*, extracting metallic values from ore concentrates, (*P.*), *B.*, 444.

Fleck, *L. C.* See Ritter, *G. J.*

Fleece, *C. L.* See Neher, *F.*

Fleeson, *E. H.* See Winslow, *C. E. A.*

Fleet, *W. F.*, Potter, *H. V.*, and Damard Lacquer Co., Ltd., synthetic resin product, (*P.*), *B.*, 889.

Fleisch, *A.*, influence of hormones on the fat content of blood, *A.*, 1278.

accuracy of Bang's method for the determination of blood-lipins, *A.*, 1283.

Fleischbein, *W. von*. See Grube, *G.*

Fleischmann, *E.*, determination of yield of low-temperature tar with the aluminium retort, *B.*, 651.

carbonisation of oil shale in rotary retort, *B.*, 939.

Fleischmann Co. See Corby, *R. L.*, Gore, *H. C.*, Hoffman, *C.*, Kohman, *H. A.*, and Sak, *S.*

Fleissner, *H.*, treatment of iron ores, (*P.*), *B.*, 62.

removal of iron from clays, bauxites, etc., (*P.*), *B.*, 917.

Fleissner, *H.* See also Apold, *A.*

Fleming, *W. E.*, homogeneous carbon disulphide emulsion, *B.*, 800*.

Flemming, dyeing materials used for the manufacture of buttons, *B.*, 535.

Flemming, *W.*, manufacturing aromatically-disubstituted thioureas [thiocarbamides] of symmetric constitution, (*P.*), *B.*, 464.

Flemming & Klein Wissenschaftl. Chem. Laboratorium. See Silesia Verein Chem. Fabr.

Fletcher, *A. A.* See Campbell, *W. R.*

Fletcher, *J. E.*, relation of ferrous metals. I. and II., *A.*, 466.

Fletcher, *J. E.*, Pearce, *J. G.*, and British Cast Iron Research Association, malleable cast iron, (*P.*), *B.*, 1017.

Fletcher, *J. E.*, and Young, *H. J.*, iron castings, (*P.*), *B.*, 195, 675*.

Fletcher, *L.* See Tait, *A.*

Fleuret, *E.*, composition of fenugreek seeds and their admixture with wheat used for flour-milling, *B.*, 418.

Fleury, *J. E.*, control of bisulphite-pulp cooking, (*P.*), *B.*, 48.

Fleury, *J. E.*, toxic action of hydrocyanic acid on lasease and its relationship to the reaction of the solution, *A.*, 202.

action of mercuric salts on dialkylbarbituric acids. I. Phenylethyl, diethyl, and butylethyl derivatives, *A.*, 305.

action of mercuric salts on dialkylbarbituric acids. II. Dialyl and isopropyl-allyl derivatives, *A.*, 420.

Fleury, *P.*, and Awad, *Y.*, determination of acetone and its application to urine, *A.*, 984.

Fleury, *P.*, and Genevois, *P.*, determination of xanthine bases in urine, *A.*, 1284.

Flickinger, *A. B.* See Holdaway, *H. H.*

Flieg, *O.* See Badische Anilin- & Soda-Fabrik.

Flieger, *A. G.* See Höft, *A. M.*

Flinn, *F. B.*, potential public health hazards from the use of "ethylgasoline," *B.*, 260.

Flint, *F. C.*, and Payne, *A. R.*, [glass] tank block corrosion by shelving, *B.*, 916.

Flinnemann, *R. F.*, [alloy for] resisting oxidation at high temperatures, (*P.*), *B.*, 63.

Flodin, *H.*, direct process for manufacture of steel, *B.*, 162*.

Flodin, *H. G.*, and Gustafson, *E. G. T.*, ["rustless"] iron alloy, (*P.*), *B.*, 1018.

Flodin, *H. G.*, Gustafson, *E. G. T.*, and Cornelius, *H. G. E.*, producing iron directly out of iron ore, (*P.*), *B.*, 635.

Flossel, *C.*, and Eisen- & Stahlwerke Hoesch Akt.-Ges., manufacture of iron and steel, (*P.*), *B.*, 754.

Flood, *D.* See Ryan, *H.*

Flor, *K.* See Salzwerk Heilbronn A.-G.

Florence, *G.*, and Couture, *E.*, complex compounds of chromium with amino-acids, *A.*, 716.

Florentin, *D.*, determination of soluble silica in cements, mortars, and concretes, *B.*, 668, 1015*.

Florentin, *D.* See Kling, *A.*

Florentin, *D.* See Bakelite G.m.b.H.

Flores, *E. J.*, liquid fuel, (*P.*), *B.*, 524.

denatured alcohol, (*P.*), *B.*, 765.

Floyd, *F. M.*, apparatus for refining hydrocarbon materials, (*P.*), *B.*, 700.

Floyd, *T. W.* See Bradley, *M. J.*

Flürschein, *B.*, and Holmes, *E. L.*, laws of aromatic substitution. V. Directing effect of electrolytically dissociated groups, *A.*, 830.

Flitsch, *C.* See Zetsche, *F.*

Flumiani, *G.*, colloid-chemical study of the photo-polymerisation product of vinyl chloride, *A.*, 677.

Flusin, *G.*, and Giran, *H.*, determination of calcium carbide in calcium cyanamide, *B.*, 684.

Fluss, *A.* See Farbwerke vorm. Meister, Lucius, & Brüning.

Focke, hot water infusion (5%) of digitalis leaves and its long-period valuation, *B.*, 896.

Focken, *C. M.* See Townsend, *J. S.*

Fodor, *A.*, solution of silver micelles by hydrogen peroxide; adsorption compounds or astochiometric compounds in silver sols and precipitates, *A.*, 795.

Fodor, *A.*, and Epstein, *C.*, reversibility of acid gelatin on dialysis, *A.*, 1098.

Fodor, *A.*, and Frankel, *M.*, synthetic preparation of substances containing adsorbed amino-acid. I. Action of aluminium amalgam on formylglycine. II. Action of aluminium amalgam on *dl*-formyl-leucine, *A.*, 1234.

Fodor, *A.*, and Mayer, *K.*, spectrophotometric and cataphoretic studies of the adsorptive power of proteins for methylene-blue chloride, *A.*, 1091.

Fodor, *A.*, and Riwlin, *R.*, adsorption by an optical method; fixation by dispersoids of methylene-blue within the disperse phase, *A.*, 238.

Fodor, *A.*, and Schönfeld, *R.*, protein-splitting enzymes in macerated peas, *A.*, 366.

Fodor, *A.*, and Weizmann, *M.*, glycerol esters of the amino-acids, *A.*, 716.

Foerster, *F.*, and Vogel, *R.*, sulphuric acid and its salts. III. Behaviour of sulphurous acid towards thiosulphuric acid, *A.*, 1016.

Foëx, *G.*, and Forrer, *R.*, sensitive apparatus for precision measurements of coefficients of magnetisation at various temperatures, *A.*, 932.

Förster, *J.*, barometric pressure and gaseous metabolism of erythrocytes, *A.*, 535.

Förster, *J.* See also Ernst, *Z.*

Fogh, *H. C.* See Goggin, *J. F.*, and Rice, *A. C.*

Fogh, *C. S.*, and Ore Roasting Development Co., recovering oil from shale, (*P.*), *B.*, 119.

Fogler, *M. F.* See Dean, *R. S.*

Foit, *K.*, determination of nitrogen in urine and in blood, *A.*, 648.

Fokin, *L.*, cyclic process for absorbing ammonia from coke-oven gases, *B.*, 531.

Foley, *A. L.*, effect of ultra-violet light and X-rays on the stability of matter, *A.*, 109.

Foley, *F. B.*, amorphous cement and the formation of ferrite in the light of X-ray evidence, *B.*, 59.

Folin, *O.*, determination of sugar in blood and normal urine, *A.*, 648.

Folin, *O.*, and Svedberg, *A.*, sugar in urine and in blood, *A.*, 1232.

Folsom, *R. M.*, Raymond, *C. A.*, and New England Fuel & Transportation Co., distilling bituminous coal with recovery of gaseous distillate, (*P.*), *B.*, 779.

Fonda, *G. R.*, and General Electric Co., incandescent lamp, (*P.*), *B.*, 135*.

electric incandescent device [lamp], (*P.*), *B.*, 834.

filament [for electric lamps] and method of manufacture thereof, (*P.*), *B.*, 493*.

Fonda, *G. R.* See also British Thomson-Houston Co., Ltd.

Fonda, *J. S.* See Rhodes, *F. H.*

Fonrobert, *E.*, and Pallant, *F.*, determination of the colour intensity of resins, varnishes, oils, etc., *B.*, 201, 450, 760.

tung oil, *B.*, 371.

crystalline glyceryl triacetate and abietic anhydride, *B.*, 591.

Fonrobert, *E.* See also Chem. Fabr. *K. Albert.*

Fontana, *C.*, [crystal] structure of manganous oxide, *A.*, 995.

Fontana, *C.* See also Levi, *G. R.*

Fontane, *C. A.*, and Conti, *E.*, alloy, (*P.*), *B.*, 64*.

Fontes, G., do ammonium salts exist in the blood? A., 965.
 Fontes, G., and Thiolle, L., I. Changes in total iron in animals during rest. II. Changes in the iron reserve in new-born animals. III. Minimum daily excretion of iron by fully-grown young dogs. IV. Content of non-haemoglobin iron in serum and its decrease during experimental anaemia, A., 424.
 preparation of the phosphomolybdate acid reagent, A., 1282.
 Fontes, G., and Yovanovitch, A., do ammonium salts exist in the blood? A., 85.
 effect of light on nitrogen metabolism, A., 319.
 Fouzès-Diacou, abnormal wines, B., 104.
 Foote, H., and Leopold, G., freezing points, A., 117.
 Foote, H. W., and Bradley, W. M., determination of calcium by conversion of the oxalate into carbonate, A., 491.
 Foote, P. D., Ruzik, A. E., and Chenault, R. L., energy of active nitrogen, A., 1031.
 Foote, P. D. See also Ellett, A., and Mohler, F. L.
 Footner, H. B., and Smiley, S., reactions of organic thiosulphates, A., 159.
 Foray, E., extraction of the essential principles of plants, flowers, fruit, and the like, (P.), B., 233.
 deacidification, deodorisation, and clarification of oils, fats, and waxes, (P.), B., 594.
 extraction of the essential principles of plants, flowers, fruit, animal matter, etc., (P.), B., 709.
 refining of olive and other edible oils, (P.), B., 705.
 deodorising, clarifying, and neutralising animal and vegetable oils, fats, and waxes, (P.), B., 987.
 Forbes, E. B., Fries, J. A., and Kriss, M., maintenance requirement of cattle for protein as indicated by the fasting catabolism of dry cows, A., 862.
 Forbes, E. B., and Kriss, M., revised net energy values of feeding stuffs for cattle, B., 332.
 Forbes, E. B., and Swift, R. W., iron content of meats, A., 538.
 Forbes, G. S., Glass, S. W., and Fuoss, R. M., oxidation potentials and equilibria in the system chlorine-iodine-hydrochloric acid-water, A., 128.
 Forbes, W. B., examination of commercial tannic acid by comparative methods, B., 461.
 Force, H. J., rail steel, (P.), B., 196.
 Force, J., and General Electric Co., mercury vapour device, (P.), B., 65.
 Ford, (Mits.) G. W. See Hawkins, G. A.
 Ford, J. S., and Tait, A., evaluation of hops by chemical and biological tests, B., 170.
 Forest Products Research Corporation. See Renner, H.
 Forestier, H., and Chaudron, G., thermomagnetic behaviour of ferrites, A., 566.
 Forgan-Potts, J., and Chadwick, V. R., removal of dust, fumes, and the like, (P.), B., 308*.
 Forkel, H. See Weygand, C.
 Form, F. See Oliver-Mandal, F.
 Forrer, G. S., and Norton, C. E., oxidation potentials of quaternary ammonium radicals and alkali metals in liquid ammonia, A., 1105.
 Forrer, R., discontinuities in the magnetisation of nickel; realisation of a state with simple cycle, A., 667.
 structure of the atomic magnet; demonstration of the existence of a doublet in nickel, A., 670.
 structure of the atomic magnet; its normal position in relation to the lattice and the permanent magnetisation, A., 878.
 structure of the atomic magnet; rotation and reversal of the multiplet, A., 1075.
 structure of the atomic magnet and the mechanical effects of magnetisation, A., 1189.
 Forrest, R. See also Foix, G., and Weiss, P.
 Forrest, C. N., treating gilsonite; gilsonite products, (P.), B., 478.
 Forrest, C. N., Hayden, H. P., and Barber Asphalt Co., treatment of hydrocarbons, (P.), B., 183.
 Forrest, C. N., Hayden, H. P., and Douthett, O. R., gilsonite products, (P.), B., 575*.
 Forrest, C. N., Hayden, H. P., Douthett, O. R., and Barber Asphalt Co., gilsonite product and its manufacture, (P.), B., 478.
 Forssén, O., reaction of α -tolidine with surface waters, B., 723.
 Forssén, S., retort, (P.), B., 696.
 Forst, A. W., substances in ergot affecting the uterus, A., 863.
 Forst, A. W., and Weisse, H., oxytocic substances of ergot. II. Histamine, A., 1281.
 Forster, M. O., and Rao, K. J. N., isomeric phenylserines, A., 1037.
 camphane series, XLII. The unstable modification of isomeric camphor, A., 1251.
 Forster, M. O., and Shukla, P. P., constitution of Manasse's hydroxycamphor, A., 408*.
 Forster, R. R., and Hanson, T. H., identification of naphthalenoid reduction products of azo-dyes, B., 909.
 Forster, G. E. See Cooper, E. A.
 Forsyth, A. C. See Harder, O. E.
 Forsyth, R., Nimkar, V. K., and Pyman, F. L., nitration of benzamidines, A., 611.
 Forsyth, R., and Pyman, F. L., tautomerism of amidines. VI. Methylation of 4-anilino-2-phenyl-6-methylpyrimidine, A., 1156.
 Forti, G., action of salts of quinoline, strychnine, morphine, and caffeine on leucocytes, A., 968.
 Fortner, P., incineration [of foodstuffs], B., 688.
 Fortsch, A. R., and Whitman, W. G., specific heats of oils, B., 810.
 Foshag, W. F., identity of newtonite with alunite, A., 709.
 Foshag, W. F., and Gago, R. B., hedyphane from Franklin Furnace, New Jersey, A., 380.
 Forse, R., formation of carbamide and a substance giving the same colour reaction as formaldehyde with phenylhydrazine, by heating plant juices, A., 438.
 new constituent of plants, allantoic acid, A., 648.
 Foster, E., and Vermont Casein Pty., Ltd., apparatus for drying casein curd, (P.), B., 233*.
 Foster, G. E. See Fairbourne, A.
 Foster, G. L., and Benninghoven, C. D., fat and glycogen in tissues in experimentally induced obesity in the rat, A., 1271.
 Foster, G. L., and Schmidt, C. L. A., separation of the dicarboxylic amino-acids from certain protein hydrolysates by electrical transport, A., 902.
 Foster, J. S., Stark effect for H_2 and He 4686 Å, A., 2, 330.
 discharge of electricity through gases, A., 219.
 second order Stark effect, A., 987.

Foster, J. S., and Chalk, M. L., observed relative intensities of Stark components in hydrogen, A., 1070.
 Foster, L. S. See Read, R. R.
 Foster, M. F. See Böllmann, H.
 Foster, R. H. K., use of methyl salicylate in a flow-meter, B., 175.
 Foster, S. B. See Thomas, d. W.
 Fothergill, H., evaporators, (P.), B., 2, 471, 1000*.
 Fouassier, M., and Maurice, G., relation between the lactic acid content of milk and its loss in dry extract, B., 643.
 Fouls-Springer, E., See Vereinigte Mautnor'sche Preschefefab. G.m.b.H.
 Foulk, C. W., and Badwen, A. T., new type of end-point in electrometric titration and its application to iodometry, A., 927.
 Found, C. F., and Reynolds, N. B., direct-reading ionisation gauge, A., 1020.
 Found, C. G. See British Thomson-Houston Co., Ltd.
 Fournier, M., treatment of gases at high temperatures, (P.), B., 145, 712*.
 Fournéau, E., and Belalcano, α - and β -naphthoxypropionic acids, their mono-nitro-derivatives and optical isomers, A., 288.
 Fournéau, E., and Marqués, T. R. Y., preparation of glycerol α -monochlorohydrin, A., 711.
 Fournéau, E. See also Girard, A., and Ribas, I.
 Fournier, G., absorption of β -particles by matter, A., 880.
 Fournier, G. See also Lathe, (Mme) J. S.
 Fourrier, L. See Dollmer, E.
 Fowler, A., spectrum of ionised oxygen (O II), A., 445.
 ionisation potential of O II, A., 1073.
 Fowler, R. D. See Stewart, T. D.
 Fowler, R. H., assemblies of imperfect gases by the method of partition functions, A., 16.
 statistical mechanics of assemblies of ionised atoms and electrons, A., 553.
 Fowler, R. H., and Hartree, D. R., spectrum of ionised oxygen (O II), A., 650.
 Fowler, S., and Edser, E., treatment of crude cholesterol [wool fat] materials and manufacture of anti-corrosive preparations, (P.), B., 769.
 anti-corrosive preparations, (P.), B., 988.
 Fowles, G., basic copper sulphates, A., 922.
 Fowweather, F. S., determination of iron in blood, tissues, and urine, A., 443.
 determination of the amount and composition of the fat of feces, A., 971.
 Fox, C. J. J., and Mankodi, C. L., device for working a thermostat at low temperatures, A., 378.
 Fox, E. L. See Benedict, F. G., and Carpenter, T. M.
 Fox, G. W. See Duffendack, O. S.
 Fox, H. M., new porphyrin, A., 193.
 chlorocoruan, a pigment related to haemoglobin, A., 313.
 Forwell, G. E., volatile matter in coke, B., 937.
 Fraenkel, W., rate of solution of base amalgams in acids, B., 366.
 mechanism of ageing process in aluminium alloys, B., 634.
 Fraenkel, W., [with Schaller, P., and Quincke (Frl.)], separation of supersaturated mixed crystals, A., 896.
 Fraenkel, W., and Stern, A., gold-nickel alloys, A., 344.
 Fraenkel, W. See also Lorenz, R.
 Fränkl, J., distillation of carbonaceous material, (P.), B., 350.
 water-gas generator with regenerative heat-storing device, (P.), B., 429.
 production of hydrogen from water-gas and steam, (P.), B., 908.
 Fränz, H., direction of emission of secondary β -rays, A., 1190.
 Fränz, H., and Kallmann, H., excitation of spectra of gases by chemical reaction, A., 109.
 Frame, A. F., removing chemicals from solids and semi-solids; distilling wood, (P.), B., 119.
 France, A., washing coal and other minerals, (P.), B., 971.
 France, H., evaporation of solutions of salt or other substances to produce crystals, (P.), B., 2.
 France, R. D. See Freeman, J. R., jun.
 France, W. G., ultramicroscopic motio picture study of the relation of colloidal content and plasticity in clays, B., 361.
 Franchot, R., specific efficiency of the blast furnace, B., 880.
 Francis, A. W., relative rates of certain ionic reactions; [determination of arsenic acid], A., 490.
 directive influence of substituents in the benzene ring. VI. A., 828.
 determination of unsaturated content of petroleum products, B., 811.
 Francis, A. W., Andrews, D. H., and Johnston, J., directive influence of substituents in the benzene ring. V. Suggested relations between directive influence and thermal data, A., 828.
 Francis, A. W. See also Gibbs, H. D.
 Francis, F., and Gauntlett, H. F., non-acidic oxidation products of paraffin wax, A., 1119.
 Francis, F., and Wood, N. E., b. p. of some higher aliphatic *n*-hydrocarbons, A., 816.
 Francis, G., centrifugal separators, (P.), B., 968.
 Francis, W., laboratory pump for the circulation of gases, B., 111.
 Francis, W., and Wheeler, R. V., resins in coal; composition of coal, B., 650.
 spontaneous combustion of coal; the most readily oxidisable constituents of coal, B., 1000.
 Franck, H. See Stickstoffwerke G.m.b.H.
 Franck, H. H., and Hockwald, F., heat of reaction in the formation of calcium cyanamide [from calcium carbide], B., 88.
 Franck, J., elementary processes of photochemical reactions, A., 583*.
 Franck, J. See also Caro, G.
 François, M., and Lormand, C., micrographic test for tartaric acid in solutions containing it, B., 802.
 François, M., and Seguin, L., black currant juice and the reactions of orchil, B., 382, 510*.
 François, T. See André, E.
 Frank, A. R. See Caro, N.
 Frank, E., manufacture of hydrochloric acid and magnesia from magnesium chloride, (P.), B., 320.
 Frank, E., Nothmann, M., and Hartmann, E., glycogen content of the liver under insulin. II, A., 1278.
 Frank, E., Nothmann, M., and Wagner, A., guanidine hypoglycaemia, A., 1054.
 Frank, F., preparation of stable lubricating and insulating oils, (P.), B., 147.
 Frank, R. See Borsche, W.
 Frank, W. See Rhenanian Verein Chem. Fabr. A.-G.
 Franke, A., and Dworzak, R., determination of chromium in chromite, B., 589.

Franke, A., and Sigmund, F., action of ultra-violet rays on aldehydes; hexahydrobenzaldehyde, phenylacetaldehyde, and hydrocinnamaldehyde, A., 292.

Frankel, M. See Fodor, A.

Frankenburger, W., combination of nitrogen with lithium and the mechanism of this reaction, A., 1214.

Frankenburger, W. See also Badische Anilin- & Soda-Fabrik.

Frankensteiner Magnesitwerke A.-G., and Kattner, R., briquetting fuels, (P.), B., 4.

Frankensteiner Magnesitwerke A.-G. See also Kattner, R.

Franklin, C. R., manufacture of propellant powders, (P.), B., 112. [flameless] propellant powder, (P.), B., 612.

Franklin, R. G. See Cunlife, P. W.

Franz, T., processes for dressing coal, lignite, and like materials, (P.), B., 701.

Frary, F. C., and Aluminum Co. of America, refractory lining for crucibles [for aluminium alloys], (P.), B., 330. electrothermal reduction of alumina, (P.), B., 833.

Fraser, A. See Rissik, Fraser & Co., Ltd.

Fraser, R., refractive index of gases and vapours in a magnetic field, A., 567.

Fraser, R. P. See Bone, W. A., and Finch, G. I.

Fraser, W. M., apparatus for distillation [of oils], (P.), B., 41.

Fraymouth, W. A., and Bhopal Produce Trust, Ltd., recovering oxalate from tree barks, (P.), B., 386.

Frayne, J. G., and Smith, A. W., absorption spectra of the vapours of aluminium, gallium, indium, and thallium in the ultra-violet, A., 214. absorption spectra of the vapours of zinc, cadmium, lead, tin, bismuth, and antimony, A., 550.

Frazier, C. E., annealing furnaces [lehrs], (P.), B., 408.

Frazier, R. See Hamilton, C. S.

Frazier, W. C. See Lepkovsky, S.

Fréchon, E. M. E., recovering benzene from gases, (P.), B., 147. recovering by-products of coal distillation, (P.), B., 147. [base-exchange] bodies for the purification of water, (P.), B., 390. purification of hard water by base-exchanging bodies, (P.), B., 390.

Fred, E. B., Peterson, W. H., and Mulyania, M., effect of lactic acid bacteria on the acetone-butyl alcohol fermentation, A., 1177.

Fred, E. B. See also Domogalla, B. P., Peterson, C. S., Peterson, W. H., and Viljoen, J. A.

Frederich, L. See Siemens & Halske A.-G.

Frederick, R. C. See Shaw, T. B.

Fredman, M. See Lagerqvist, J.

Free, E. E., differences between nitrogen and helium as inert gases in anaerobic experiments on plants, A., 1280.

Free, O., zirconium in Colorado pitchblende, A., 709.

Freeborough, H., [continuous] kiln, (P.), B., 901.

Freed, M. L., mullite refractories formed by calcining cyanite; their industrial application, B., 631.

Fréderiekz, V., and Isakson, A., spatially extended electron in the general relativity theory, A., 1078.

Freedman, L., neosalvarsan. I. Analysis, B., 767.

Freedman, P., equations for thermionic emission, A., 877.

Freeman, G. C., and Antiscale Corporation, protection of metallic surfaces from deposition of scale, (P.), B., 176.

Freeman, H., genesis of sulphide ores, A., 494.

Freeman, J. R., recrystallisation temperatures of cold-rolled electrolytic iron and open-hearth steel strip, B., 919.

Freeman, J. R., jun., and Drance, R. D., comparative cold-rolling tests of open-hearth steel strip [deep drawing stock] and electrolytic iron strip, B., 57.

Freeman, J. R., jun., Sillers, F., jun., and Brandt, P., pure zinc at normal and elevated temperatures, A., 997.

Freeman, N. H., treating oil-bearing shales, (P.), B., 396.

Freer, R. M. See Read, R. R.

Freese, C. See Windaus, A.

Freeth, F. A., Munro, L. A., and Solvay Process Co., removal of calcium and magnesium from rock-salt brine, (P.), B., 823.

Freiburger, M., [comparison of the] "hot-bleach" and "Mohr-bleach" processes, B., 534.

Freigang, W. See Koenigs, F.

Freise, F. W., and American Cyanamid Co., [mixed] fertiliser corrective, (P.), B., 1025.

Freitag, K. See Meitner, (Fr.) L.

Frejka, J., and Všetečka, K., determination of lactic acid; micro-determination in the blood, A., 327.

Frejka, J., and Záhroba, L., catalytic reduction of dimethylglyoxime; β -diaminobutane, A., 1233.

Fremont-Smith, F., and Dailey, M. E., effect of protein concentration on the chloride equilibrium between plasma and cerebrospinal fluid, A., 1168.

French, H. E., and Wirtel, A. F., α -naphthylcarbamide as a reagent for phenols and aromatic amines, A., 830.

French, H. E. See also Bickel, V. T.

French, H. J., metals to resist corrosion or high temperatures, B., 951.

French, H. J., and Klopsch, O. Z., characteristics of cooling curves [for steel], B., 826. initial temperature and mass effects in quenching [of steels], B., 826.

French, H. J., and Tucker, W. A., flow in a low-carbon steel at various temperatures, B., 67.

French, R. W., effect of variations in concentrations of dyes in solution upon their quantitative determination spectrophotometrically; methylene blue, B., 354.

Frenkel, J., thermal agitation in solids and liquids, A., 338. [spinning electrons], A., 554.

Frenkel, J., and Finkelstein, B., influence of the size of the ions on the equation of state for strong electrolytes, A., 354.

Frérejacque, M., new camphorsulphonic acid obtained with new sulphonating agent, A., 1251.

Frerich, R. See Schulz, E. H.

Frerichs, R., spectrophotometry by great dispersion, A., 223. structure of the negative oxygen bands, A., 334.

Frere, E. See Auwers, A. von.

Fretwurst, F. See Stoerner, R.

Freudenberg, E. See Dold, H.

Freudenberg, K., Burkhardt, O., and Braun, E., acetone sugars. VIII. New aminoglucose, A., 601.

Freudenberg, K., Carrara, G., and Cohn, E., tannins and related substances. XXI. Molecular rearrangement of catechin derivatives, A., 73.

Freudenberg, K., and Dirschler, W., insulin and co-zymase, A., 1179.

Freudenberg, K., and Hess, H., detection of hydroxyl groups of different types; application to lignin, A., 935.

Freudenberg, K., and Noé, A., steric series. VII. Configuration of aspartic acid, A., 63.

Freudenberg, K., and Smeykal, K., acetone sugars. VII. Constitution of diacetonegalactose [galactose diisopropylidene ether], A., 274.

Freudenberg, K., and Wolf, Anton, acetone sugars. IX. Constitution of the α -isopropylidene ethers of rhamnose and manose, A., 601.

Freudenberg, W., titanobiotite (wodanite), A., 380.

Freund, E., and Lustig, B., protein coagulation, A., 354. inactivation of serum, A., 423.

Freund, E. See also Chem. Fabr. auf Aktien vorm. E. Schering.

Freundier, P., and Méninger, (Mile) Y., determination of rubidium by means of silicotungstic acid; detection of rubidium in the ashes of *Laminaria flexicaulis*, A., 702.

Freundlich, H., electrification at interfaces, A., 1094.

Freundlich, H., and Beck, W., sensitisation by albumins and pseudoglobulins from normal and immune sera, A., 316.

Freundlich, H., and Bircumshaw, L. L., thixotropic behaviour of aluminium hydroxide gels, A., 1093.

Freundlich, H., and Birstein, V., validity of Traube's rule for the coagulation of hydrophilic sols, A., 905.

properties of Blau's complex salts, A., 1095.

Freundlich, H., and Cohn, H., properties of alkaline silicic acid sols, A., 677.

Freundlich, H., and Dannenberg, H., time change of electric double refraction in sols with non-spherical particles. I. Behaviour of vanadium pentoxide sol. II. Behaviour of benzopurpurin sol, A., 471.

Freundlich, H., and Jores, H., viscosity and elasticity of soap solutions, A., 471.

Freundlich, H., and Kroepelin, H., kinetics of the change of halogenalkylamines into heterocyclic compounds. IV., A., 1010.

Freundlich, H., and Mitsukuri, S., coagulation of alkali-blue-tannin sols by electrolytes, A., 794.

Freundlich, H., and Neukircher, H., influence of hydrogen-ion concentration on the viscosity and elasticity of gelatin solutions, A., 351.

Freundlich, H., Neukircher, H., and Zocher, H., elasticity and flow double refraction in sols having non-spherical particles. I., and II., A., 241.

Freundlich, H., and Paris, A., slow hydrolysis of potassium pentachlororuthenate, A., 1097.

Freundlich, H., and Rosenthal, A., velocity of the sol-gel transformation of concentrated iron oxide sols, A., 905.

Freundlich, H., and Schikorr, G., transformation of maleic acid into fumaric acid accelerated by colloidal sulphur, A., 481.

Frey, A., calcium oxalate monohydrate and trihydrate in plants, A., 440. pigments of *Aspergillus niger*, A., 869. refractive power of cellulose fibres, A., 1081.

Frey, C. N. See Hoffman, C.

Frey, E. K., and Kraut, H., cardiac stimulant excreted by the kidneys, A., 1163.

Frey, R. W. See Veitch, F. P.

Frey, W., and Gomperz, E. von, production of single-crystal metal wires from liquid metal, (P.), B., 833.

Freyberg, J. See Stobbe, H.

Freyer, E. B. See Yoe, J. H.

Frey Engineering Co. See Häring, F.

Freyssmidt, H. J. See Nitschke, A.

Friauf, J. B., crystal structure of magnesium plumbide, A., 889.

Frick, F. F. filter, (P.), B., 728.

Frick, F. F., and Anaconda Copper Mining Co., recovery of vanadium, (P.), B., 885.

Frick, F. F., Carstens, C. E., and Anaconda Copper Mining Co., electrolytic precipitation of copper, (P.), B., 673.

Frick, F. F. See also Laist, F.

Fricke, H., Glaser, O., and Rothstein, K., true absorption of hard X-rays in water, A., 1072.

Fricke, K., behaviour of beryllium in the formation of complexes, A., 368.

Fricke, K., Fischer, F. A., and Borchers, H., enzyme purification by electrodialysis and electro-osmosis, A., 791, 1038.

Fricke, K., and Havestadt, L., complex compounds of beryllium. IV., A., 695.

Fricke, K., and Rode, O., complex compounds of beryllium. III., A., 694.

Fricke, K., and Spilker, G., reduction of thionaphthen, A., 409.

Fridl, K., determination of arsenic as elementary arsenic and as magnesium ammonium arsenate hexahydrate, A., 591. separation of arsenic from selenium and its gravimetric determination, A., 702.

Fried, F., E.M.F. measurements with cells of the type $M_1|MO|NaOH|H_2|Pt$, and their application to the verification of Nernst's heat theorem, A., 1105.

Friedel, G., fatty acids and amides substances, A., 340. X-ray diagrams of mixed crystals, A., 562.

Friedenthal, H., tanning process, (P.), B., 24. double salts of thiocyanic acid, (P.), B., 400.

Frieder. See Kretschmer, M.

Friederich, E., properties of simple compounds and types of the solid state, A., 16. conversion of nitrides which are difficult to decompose, as silicon nitride, into an easily decomposed form, (P.), B., 191.

Friederich, E., and General Electric Co., leading-in wire for glass vessels [electric lamp bulbs, etc.], (P.), B., 676.

Friederich, W. F., and Vervoorst, P., metalammines and hydrazinates of the bivalent heavy metal chlorates and perchlorates as primary explosives, B., 933.

Friederic, L. See Badische Anilin- & Soda-Fabrik.

Friedländer, G., Indigosol O [in dyeing and printing], B., 705, 872. new dyeing processes using Indigosol O, B., 783.

Friedländer, H., and Janser, A., production of electrical insulating material, (P.), B., 986.

Friedländer, K., and Rosenthal, W. G., influence of phosphate ions on the blood and urine sugar of the normal and diabetic organism, A., 752.

Friedmann, L. See Margosches, B. M.

Friedolsheim, A. von. See Neber, P. W.

Friedrich, A., and Brüda, B., lignin. II. Preparation of primary lignin, A., 824.

Friedrich, A., and Diwald, J., lignin. I. Spruce lignin, B., 161.

Friedrich, A. See also Fromm, E.

Friedrich, H. See Koenigs, E.

Friedrich, W. H., production of alkali carbonates from alkali sulphates, (P.), B., 915.

Friedrichs, F., method of recognising chemically inferior glasses, B., 585.

Friend, J. N., examination of Dead Sea water for eka-casium and eka-iodine, A., 708.

ancient iron from Richborough and Folkestone, B., 131*.

Friend, J. N., and Griffin, B. L., influence of the hardening period upon the protective influence of paints, B., 553.

Fries, F. See Imhoff, K.

Fries, F. A. See Ziegler, K.

Fries, J. A. See Forbes, E. B.

Fries, K., [with Hass, F.], [constitution of naphthalene and its derivatives], A., 288.

Fries, K., and Sattien, K., 2-nitrocoumaran-3-one, A., 819.

Fries, K., and Schimmelechmidt, K., acetylphthalols [hydroxyuaphthyl methyl ketones], II, A., 294.

Friley, M., absorption of the penetrating radiation from actinium in equilibrium with its derivatives, A., 771.

Frink, R. L., annealing glassware, (P.), B., 489*.

Frisch, J., Pauli, W., and Valkó, E., electrolyte-free, water-soluble proteins. V. Acid proteins. II. Donnan equilibrium and colloidal behaviour of proteins, A., 121.

Frister, F. See Cassella & Co., L., and Kalischer, G.

Fritz, E. H., some successful come 10 saggar bodies, B., 917.

Fritz, G., physiology of high altitudes. I. Effect of diminished pressure on the p_{H} and carbon dioxide-combining power of blood, A., 535.

Fritzmann, E. See Tschugaev, L.

Fritzsehe, A. See Borsche, W.

Fritzsche, H. See Soc. of Chem. Industry in Basle.

Fritzsche, P. See L. G. Farbenind., A.-G.

Friwald, O. E., influence of the ionic charge on the osmotic behaviour of alcoholic solutions, A., 1100.

Friwald, O. E. See also Schreiner, E.

Frizell, D. R., Stagner, B. A., and Union Oil Co. of California, preparing soluble oils, (P.), B., 575.

Frizell, D. R., and Union Oil Co. of California, castor machine oils, (P.), B., 575.

Frobose, V. See Engel, H.

Frode, G. See Dilthey, W.

Frohlich, P., polarisation of fluorescent light from solutions of dyes, A., 109.

Frolich, J. See Soc. of Chem. Industry in Basle.

Frolich, P. K., electrodeposition of zinc from electrolytes containing gelatin and aluminium sulphate, B., 494.

Frolich, P. K., and Clark, G. L., electrolytic deposition of metals. I. Theory of the mechanism, B., 131.

Frolich, P. K., Clark, G. L., and Aborn, R. A., cathodic deposition of metals. II. Electrochemical and X-ray investigations on lead precipitates, A., 804. electrochemical and X-ray studies of lead deposits, B., 494.

Frolich, P. K. See also Clark, G. L.

Fromageot, C., oxidation-reduction potentials of reversible oxidising systems, and oxidation of organic molecules by these systems, A., 687.

oxidation of pyravine acid by ceric ions, A., 820.

oxidation of pyravine acid by metallic ions; determination of ketonic and enolic forms, A., 1124.

Fronim, E. [with Kapeller, R., Pirk, L., Fanti, P., Chajkin, L., Hahn, A., Liepert, T., Adler, M., Feniger, M., Krauss, P., Schwanenfeld, M., and Wetternik, L.], derivatives of carhamide, A., 716.

Fronim, E., and Friedrich, A., cryoscopic test-tube method for determination of molecular weights, A., 907.

Fronim, H. See Tröger, J.

Fronim, W. See Krause, E.

Frommer, S. See Rosenheim, 4.

Frosell, Ö., and Williamsport Building Products Co., plastic [magnesia compositions], (P.), B., 211*.

Frossard, J., Rebert, C., and Lothareff, B., printing imitation embroidery or plaited effects on woven fabrics, B., 681.

Frossard, J. See also Scheunert, A.

Frossard, R., commercial papain; its purification, B., 510.

Frost, E. C. See Jones, C. O.

Frost, M. A. See Gill, J. P.

Froude, R. H., Boby, W. V., and Boby & Co., Ltd., W., means for withdrawing and delivering measured quantities of liquids, applicable for delivering quantities of reagent solutions in water-treating apparatus, (P.), B., 720*.

Frowin, F. See Wolff & Co.

Frit, J. See Akt.-Ges. für Industriewerte.

Frumkin, A., influence of the electric field on the adsorption of neutral molecules, A., 347.

spreading of dyes on the surface of water, A., 674.

Traube's rule applied to phenomena of partition between two phases, A., 1090.

structure of the surface layer. III. Capillary curves of the higher fatty acids and the equation expressing the state of the surface layer. IV. Electric properties of unimolecular layers. V. Method of verifying Gibbs' equation, A., 1093.

Frumkin, A., and Donde, A., mercury dropping electrodes, A., 1104.

Frumkin, A., Donde, A., and Kulvarksaja, R., phase boundary forces at gas-liquid interfaces. IV. Adsorption and orientation of molecules of benzene derivatives, A., 1092.

Frumkin, A., and Obrutseva, I., influence of electrical field on the adsorption of neutral molecules, A., 674.

Frumkin, A., Reichstein, S., and Kulvarksaja, R., ionic adsorption at the water surface, A., 1091.

Fry, H. S., and Grote, J. W., standardisation of the Sandmeyer reaction, with special applications, A., 510.

Fry, H. S., and Schulze, E. L., liberation of hydrogen from carbon compounds. II. Interaction of ethyl alcohol, acetaldehyde, and acetone with fused alkali hydroxides, A., 710.

Fryer, P. J., and McDougall & Yalding, Ltd., insecticide, sheep dip, etc., (P.), B., 507*.

Fryer, P. J. See also McDougall & Yalding, Ltd.

Fryling, C. F., heats of adsorption and the problem of promoter action, A., 800.

Fuchs, H. See Margosches, B. M.

Fuchs, H. J., proteolytic enzymes of serum. I., A., 530.

micro-determination of nitrogen, A., 1115.

Fuchs, H. J., and Falkenhausen, M. von, proteolytic enzymes of the serum. III. Chemically determinable toxin-antitoxin union *in vitro*, A., 1166.

Fuchs, K. See Margosches, B. M.

Fuchs, L., and Pauli, W., general colloid chemistry. XVII. Analysis and constitution of colloidal gold. III., A., 22.

general colloid chemistry. XVIII. Analysis and constitution of colloidal gold. IV. Rate of migration, A., 354.

Fuchs, N. See Orndorf, W. R.

Fuchs, P., chemistry of satin white, B., 987.

Fuchs, R. See Akt.-Ges. für Anilin-Fab., and Heller, G.

Fuchs, W., constitution of carbonyl-hydrogen sulphite compounds, A., 952.

Fuchs, W. See also Höng, M.

Fuel Development Corporation. See Hammond, G.

Firth, A., method of measuring [instantaneous values of single potential and current] in alternating current electrolysis, A., 1213.

Firth, O., tryptophan content of proteins; determination of tryptophan, A., 633.

Firth, O., and Marian, J., connexion between carbohydrate and phosphoric acid metabolism. I. Hydrolysis of hexosediphosphoric acid in the mammalian organism, A., 428.

Firth, R., diffusion experiments in solutions, A., 21.

Firth, R., and Pechhold, R., physical properties of serum on addition of "water-binding" substances, A., 22*.

Firth, R., and Pechhold, R. [with Keller, R.], physical properties of serum on addition of "water-binding" substances, A., 242*.

Firth, R. See also Giekhorn, J.

Fues, E., characteristic vibration spectra of diatomic molecules and wave mechanics, A., 881.

intensity of band lines and the affinity spectrum of diatomic molecules, A., 1078. production of moisture-resisting papers, (P.), B., 740*.

Fuhrmann, W., apparatus for removing deposited impurities from textile or metallic fabrics, braided or felted materials used in the manufacture of paper, (P.), B., 10.

Fujihara, M., and Koken, I., enzymic decomposition of hexosemonophosphoric acid due to bone extract; influence of sodium hexosemonophosphate on bone fracture, A., 1176.

Fujihara, T., passivity of iron by dilute nitric acid, B., 194.

nature of the protective film of iron, B., 243.

Fujikawa, Y., effect of electric field on the spectral lines of zinc and cadmium, A., 986.

Fujita, A., electric properties and ionic permeability of membranes. V. Membranes of amphoteric character, A., 120.

electrical properties and ionic permeability of membranes. VIII. Permeability of dried collodion membranes for non-electrolytes, A., 574.

Fujita, A. See also Michaelis, L.

Fujiyama, T., producing cement, (P.), B., 15*.

Fukagawa, T. See Tomita, M.

Fukelius, L. See Wieland, H.

Fukuda, M., new lines ($1S-2p_{1,0}$) of zinc, cadmium, and mercury, A., 651.

change of wave-length of the cadmium red line 6438.7 Å, A., 651.

Fukuda, M., Kuyama, T., and Uchida, Y., spectra of metals under heavy current excitation, A., 652.

Fukushima, S. See Matsui, M.

Fulcher, F. C., straining or filtering apparatus, (P.), B., 473*.

Fulcher, G. S., analysis of recent measurements of the viscosity of glasses. II., B., 157.

Fuld & Hatch Knitting Co., yarn dyeing apparatus, (P.), B., 357*.

Fulda, E., chemical equilibrium in the formation of the German potash deposits, A., 379.

Fuller, C. H. F. See Lampitt, L. H.

Fuller, D. H. F., and Moritz, F. E. B., comparative effects of pressing and draining yeast, B., 489.

Fuller, D. H. F. See also Moritz, F. E. B.

Fuller, E. W., and Fisk Rubber Co., age-resisting rubber compound, (P.), B., 375.

Fuller, G. P., properties of electrolytic iron, B., 949.

Fuller, H. C., denatured alcohol, (P.), B., 337.

Fuller, H. C., and Union Carbide and Carbon Research Laboratories, denatured alcohol, (P.), B., 337.

Fuller, T. S., Basch, D., and General Electric Co., aluminium alloy, (P.), B., 444.

Fuller Fuel Co., and Jones, M. D., process of drying materials, (P.), B., 776*.

Fuller Fuel Co., and Kaemmerling, G. H., burning fuel, (P.), B., 228.

Fuller Fuel Co. See also Jones, M. D.

Fuller-Leigh Co., and Sherban, D. V., drying apparatus, (P.), B., 81*.

Fuller-Leigh Co. See also Kaemmerling, G. H.

Fullerton, D., and Heyl, F. W., ovarian residue; protein fraction, A., 1268.

Fulmer, E. J., and Christensen, L. M., fixation of atmospheric nitrogen by yeast as a function of hydrogen-ion concentration, A., 96.

Fulmer, E. J. See also Sherwood, F. P.

Fulton, C. W., and Hutton, H. W., manufacture of a detergent, (P.), B., 553.

Fulton, C. W. See also Hutton, H. W.

Fulton, H. R., and Bowman, J. J., prevention of decay of citrus fruits, (P.), B., 27.

preservation of fresh fruits and vegetables, (P.), B., 27, 339.

Fulton, J. D., action of *s*-tetrabromobutane on organic bases, A., 304.

Fulton, S. M. See British Celanese, Ltd.

Fulwiler, W. H., fifty years of gas chemistry, B., 812*.

Fulwiler, W. H., and U.S. L. Contracting Co., gas purification, (P.), B., 699.

Fulwiler, W. H. See also Humphreys & Glasgow, Ltd.

Fumarola, F., extraction of the active biological principles from the ether extract of male fern, (P.), B., 932.

Funk, A. D., colorimetric determination of molybdenum, A., 815.

Funk, J., Thorne bleaching process [for cellulose], B., 481.

Funk, C., isolation of insulin, A., 1062.

Funk, C., and Kon, S., elementary micro-analysis; determination of sulphur and halogens, A., 853.

Funk, C. See also Klein, A., Kolodziejska, S., and Zajdel, R.

Funk, H., and Binder, F., fluoroborates, A., 1015.

Funk, A. See Wagner, H.

Fuoss, R. M. See Forbes, G. S.

Furia, M. See Berlingozzi, S.

Furlong, J. See Williams, G. M.

Furstner, W. E. See Grigant, A.

Furukawa, J. See Yamazaki, J.

Furukawa, K., spirometer method of studying continuously the gaseous metabolism of man during and after exercise, A., 190.

muscular exercise, lactic acid, and supply and utilisation of oxygen. XIII. Gaseous exchanges of restricted muscular exercise in man, A., 190.

Fuseya, *G.*, and Murata, *K.*, properties of addition agents in electrodeposition, *B.*, 950.

Fuson, *R. C.*, coupling action of the Grignard reagent. I. *o*- and *p*-Cyanobenzyl halides, *A.*, 604.
preparation of *o*-phthalaldehydic acid, *A.*, 612.
coupling action of the Grignard reagent. II. Magnesium methyl iodide and benzyl halides, *A.*, 1237.

Futagawa, *T.* See Nagaoiki, *M.*

Fuwa, *K.*, colour imparted to glass by fluorine compounds, *B.*, 13.
colour imparted to glass by sulphur and its compounds, *B.*, 13.
colour imparted to glass by selenium, *B.*, 14.
colouring glass with phosphates, *B.*, 53.
colouring glass with arsenious acid, *B.*, 53.
colour imparted to glass by carbon and its compounds, *B.*, 54.

Fyle, *A. W.* See British Dyestuffs Corporation, Ltd.

G.

Gaarder, *T.*, determination of carbonic acid in small quantities of sea-water and other fluids by means of Krogh's micro-respiration apparatus, *A.*, 1221.

Gabiano, *P.* See Darmois, *E.*

Gabriel, (*Mme.*) *L.* See Desgrez, *A.*

Gad, *G.* See Lesser, *R.*

Gadamer, *J.*, and Bruchhansen, *W. von*, oxyacanthine, *A.*, 627.

Gadamer, *J.*, and Neuhoff, *E.*, determination of the alcohol content of tinctures, *B.*, 214.

Gadamer, *J.*, and Sawai, *K.*, corybulbine, *A.*, 1161.

Gadaskin, *I. D.*, uncombined sugar in the white and yolk of the hen's egg during autogenesis, *A.*, 972.

Gaddy, *V. L.* See Kruse, *N. W.*

Gaebel, *R.* See Herzog, *R. O.*

Gaebel, *O. H.*, decomposition of creatinine with barium hydroxide, *A.*, 1129.
destruction of a hydantoin nucleus (β -methylhydantoin) in the animal body, *A.*, 1272.

Gaebel, *O. H.*, and Murlin, *J. H.*, influence of insulin, administered orally and subcutaneously, in phloridzin diabetes, *A.*, 436.

Gäda, *W.*, and Straub, *W.*, apparatus for the rapid evaporation of unstable solutions [sera, etc.], *A.*, 211.

Gaederitz, *A.* See Wittgenstein, *A.*

Gaerlan, *S. A.*, gases in the body of certain plants, *A.*, 981.

Gaertner, *G.*, helium for divers, *B.*, 319.

Gartner, *H.* See Farbw. vorm. Meister, Lucius, & Brüning.

Gärtner, *R.*, removing tetrantromethane from technical trinitrotoluene, (*P.*), *B.*, 110.

Gagarin, *R. F.* See Löwenstein, *A.*

Gage, *R. B.* See Foshag, *W. F.*

Gall, *G. E., jun.*, metal chip briquette, (*P.*), *B.*, 412.

Gaines, *W. L.*, and Nevens, *W.*, sunflower as a silage crop; composition and yield at different stages of maturity, *B.*, 296.

Gaiser, *C.*, electric cells, (*P.*), *B.*, 446.

Gaisser, *F. C.*, and Bader, *H.*, Württemberg oil shales. II., *B.*, 522.

Gait, *A. J.* See McClelland, *E. W.*

Galanos, *S.*, citric acid content of Grecian musts, *B.*, 603.

Galatini, *L.*, acetic esters of α -aminophenol, *A.*, 600.

Galecki, *A.*, precipitation of copper from acid solutions of its salts by means of zinc, *A.*, 922.

Galecki, *A.*, and Bincer, (*Mle.*) *K.*, catalysis in micro-heterogeneous systems. I. Decomposition of hydrogen peroxide by colloids, *A.*, 251.

Galecki, *A.*, and Krczeczkowska, (*Mle.*) *L.*, catalysis in micro-heterogeneous systems. II. Decomposition of hydrogen peroxide by the gold hydrosol of Gutbier and Verádi, *A.*, 251.

Galecki, *A.*, and Kuczyński, *W.*, electrochemical precipitation of copper from solutions of its salts by zinc. II., *A.*, 364.

Galecki, *A.*, and Orłowski, *T.*, electrochemical precipitation of copper from solutions of its salts by zinc. I., *A.*, 364, 805*.

Galehr, *O.* See Pettschacher, *L.*

Galibourg, *J.* See Guillet, *L.*

Gall, *H.* See Manchot, *W.*

Gall, *J.* See Jourdan, *F.*

Gallagher, *A. H.*, and Tanners Products Co., deodorising hair, feathers, and the like; treating apparatus, (*P.*), *B.*, 356.

Galley, *R.*, coagulation of clay, *A.*, 354.

Gallo, *G.*, gas black for rubber manufacture; effects and detection of grit, *B.*, 204.

Gallie, *G.*, and Porritt, *B. D.*, apparatus for the separation of grit and coarse particles from fine powders, *B.*, 935.

Gallois, *L.*, regeneration of vulcanised rubber, (*P.*), *B.*, 453.

Galloway, *O. A.*, and Sturtevant Co., *B. F.*, apparatus for drying material, (*P.*), *B.*, 649.

Galotti, *H.* See Hofmann, *K. A.*

Galt, *H. A.*, and Pittsburgh Plate Glass Co., ammonia-soda process, (*P.*), *B.*, 237.
producing commercial hydrochloric acid, (*P.*), *B.*, 533.

Galvail, *M. J.*, Vladimirov, *G. E.*, Vinogradov, *A.*, and Oppel, *W. W.*, Manoilov's reaction and its specificity, *A.*, 1165.

Galvail, *M. J.* See also Vladimirov, *G. E.*

Gammay, *H.*, production of camphor from isoborneol, (*P.*), *B.*, 995.
production of isoborneol from a mixture of camphene and associated oils, (*P.*), *B.*, 995.

Gammeter, *J. R.* See Goodrich Co., *B. F.*

Gams, *A.* See Soc. of Chem. Industry in Basle.

Ganassini, *D.*, detection of bismuth in urine, *A.*, 325.

Gane, *R.*, and Ingold, *C. K.*, influence of carbon rings on the velocity of reactions involving their side-chains. I. Hydrolysis of cyclic and open-chain malonic esters, *A.*, 249.

Ganguly, *P. B.*, scattering of light by silicate solutions, *A.*, 792.
formation of mother-of-pearl, *A.*, 813.

Gans, *O.* See Ellinger, *P.*

Gansser, *A.*, characterising hides and leather, (*P.*), *B.*, 891.

Ganz, *M.* See Lorenz, *R.*

Gara, *P. von.* See Thannhanser, *S. J.*

Garban, *H.* See Brillé, *M.*

Garby, *C. D.*, determination of dilguanide, *A.*, 1164.

Gardam, *G. E.* See Long, *C. L.*

Gardiner, *J. H.*, ultra-violet spectra of praseodymium, neodymium, samarium, europium, and erbium, *A.*, 774.

Gardiner, *S. C.*, See Richet, *C.*

Gardiner, *H. D.* See Courtaulds, Ltd.

Gardiner, *L. A.*, and American Telephone & Telegraph Co., alloy for electrical contacts, (*P.*), *B.*, 133.

Gareis, experiences in benzol recovery by the vacuum method, *B.*, 427.

Garke, *R.*, Meyer, *E.*, and Claesen, *W.*, production of plastic masses, (*P.*), *B.*, 152.

Garland, *C. S.*, Hinchley, *J. W.*, and Watson, *C. S.*, centrifugal separators, (*P.*), *B.*, 935.

Garland, *F.* See Mackilligan, *A. P.*

Garland, *J. W. Inc.* See Atkinson, *F. C.*

Garmendia, *T.* See Fernández, *O.*

Garnier, *F. H.*, determination of unsaturated hydrocarbons, *B.*, 395.

Garnier, *F. H.* See also Faragher, *W. F.*

Garnier, *M.*, significance of the variation in the Smoluchowski coagulation coefficient (*B.*), *A.*, 1204.

Garnier, *M.*, and Lewis, *W. C. M.*, effect of temperature on the rate of coagulation of gold sol, *A.*, 1204.

Garnier, *W. E.*, explosive reactions in gaseous media; explosive reactions considered generally, *A.*, 689.
adsorption on solids with special reference to molecular orientation, *A.*, 1091.

Garnier, *W. E.*, Johnson, *C. H.*, and Saunders, *S. W.*, infra-red emission from gaseous explosions, *A.*, 658.

Garnier, *W. E.*, Madden, *F. C.*, and Rnsibrooke, *J. E.*, alteration in the heats of crystallisation of the normal monobasic fatty acids. II., *A.*, 1087.

Garnier, *W. E.*, and Saunders, *S. W.*, explosive reactions in gaseous media; ionisation in gas explosions, *A.*, 654.
gaseous explosions. I. Ionisation in hydrogen and oxygen explosions, *A.*, 1205.

Garnett, *C. S.*, dissociation of dolomite, *A.*, 587.

Garnett, *H. J.* See Smith, *W. S.*

Garran, *R. R.*, system sodium thiosulphate-sodium sulphate-water, *A.*, 683.

Garratt, *D. C.* See Bennett, *C. T.*

Garre, *B.* See Tammann, *G.*

Garrett, *M. W.*, transmutation experiments, *A.*, 773.
reported transmutation of mercury into gold, *A.*, 1015.

Garrison, *A.*, behaviour of silver iodide in the photovoltaic cell, *A.*, 34.
method of measuring the relative surface charges of electrolytes, *A.*, 130.

Garrod, *A. E.* See Mackey, *L.*

Garrow, *J. R.*, low and medium temperature carbonisation of coal, oil shale, wood, peat, and the like, (*P.*), *B.*, 733*.

Garrow, *J. R.*, and Novocrete Co. of America, Inc., mixing composition for use with wood aggregates and structures, (*P.*), *B.*, 489*.

Garrow, *J. R.*, and Novocrete and Cement Products Co., Ltd., treatment [mineralising] of fibrous materials, (*P.*), *B.*, 193*.

Garvey, *B. S.* See Adams, *R.*

Garvey, *H. P.* See Varcoe, *R. G.*

Gas Industries Co. See Levin, *J. H.*

Gas Light and Coke Co., and Eve, *E. W.*, rotary scrubbers and washers for gas, (*P.*), *B.*, 39.

Gas Light and Coke Co. See also Cozens, *A. A.*, and Shannan, *W. V.*

Gaschler, *A.*, transformation of gold into mercury, *A.*, 656.

Gasifier Co., production of oil gas, (*P.*), *B.*, 527*.

Gasoline Corporation. See Greenstreet, *C. J.*, and Matlock, *C.*

Gasoline Recovery Corporation. See Burrell, *G. A.*, Oberfell, *G. G.*, and Voress, *C. L.*

Gasopopolis, *L.*, synthesis of methyl oxide from acetone, *A.*, 1125.
acetylation of aniline and the toluidines in anhydrous glycerol, *A.*, 1131.
reactions which differentiate between pinone and nonpinene, *A.*, 1148.

Gaspar y Arnal, *T.*, sensitive reagent for potassium and ammonium ions, *A.*, 591.
sensitive reagent for thallium, *A.*, 703.
reactions for carbonates, hydrogen carbonates, sulphites, and hydrogen sulphites, *A.*, 928.

Gaspar y Arnal, *T.*, and Castro-Girona y Pozurama, *A.*, complex and double ferrocyanides; photochemical reactions of the ferrocyanides of the alkali and alkaline-earth metals in the presence of mercuric chloride, *A.*, 920.

Gaspar y Arnal, *T.* See also Diaz de Rada, *F.*

Gastaldi, *C.*, Longiave, *M.*, and Sircana, *F.*, Beckmann transformation of oximes of α -ketoformhydroxamic acids [hydroxyglyoximes], *A.*, 1247.

Gastaldi, *C.*, and Princivalle, *E.*, influence of radicals in synthesis of 1:2:4-triazoles, *A.*, 1260.

Gastaldi, *C.*, and Stratta, *R.*, α -ketoformhydroxamic acids and their derivatives. XI., *A.*, 277.

Gater, *B. A. R.*, investigations on "tube" [derris], *B.*, 71.

Gates, *E.*, method and apparatus for complete combustion, (*P.*), *B.*, 37.

Gates, *J. F.* See Tucker, *E. L.*

Gates, *L. G.*, and Standard Oil Co., breaking [petroleum] emulsions, (*P.*), *B.*, 478.

Gatwood, *E. S.*, and Robinson, *R.*, synthesis of pyrillyium salts of anthocyanidin type. X. Delphinidin chloride 3-methyl ether, *A.*, 1043.

Gattefossé, *R.*, and Société Française de Produits Aromatiques, extraction of odorous constituents from grain, roots, and sweet almonds, (*P.*), *B.*, 217.

Gatterer, *A.*, absorption of gases by colloidal solutions, *A.*, 317.

Gatti, *U.* See Porlezza, *C.*

Ganbert, *P.*, detection [of wireless waves] at the faces of crystals of galena and pyrites, *A.*, 229.
"eisenbrucite," *A.*, 708.

Gaubert, *R.*, identity of fibrillar limonite with goethite, *A.*, 42.

Gauerke, *C. G.* See Marvel, *C. S.*

Ganger, *A. W.*, Storch, *H. H.*, and Burnham Chemical Co., recovering borax from saline liquors, (*P.*), *B.*, 273.
recovering sodium chloride from saline liquors, (*P.*), *B.*, 438.

Gant, *H.*, and Ehrmann, *P.*, soluble cellulose esters of the higher fatty acids, *A.*, 942.

Gault, *H.*, and Klees, *L.*, condensation of malonic esters with acetoacetic esters. I. and II., *A.*, 938.

Gauqué, *J.* See Baily, *O.*

Gantlett, *H. P.* See Francis, *F.*

Gantlett, *J. M.*, and Smiles, *S.*, sulphonation of *p*-chlorophenol, *A.*, 164.

Gaus, W. See Badische Anilin- & Soda-Fabrik.

Gaviola, E., rate of decay of fluorescence of solutions of dyes, A., 335.

Gavrilov, M., reduction of 2:5-diketopiperazine, A., 306.

Gavrilov, N. See Stadnikov, G. L.

Gay, L., thermodynamics of surface actions. II. Variation of surface tension with pressure, A., 478, 632.

distillation and rectification, B., 223.

Gayle, J. See Molingen, E.

Gayle, M. See Brass, A.

Gayler, M. L. V., constitution of zinc-copper alloys containing 45-65% Cu, B., 325*.

Gayler, M. L. V. See also Hanson, D.

Gaz Industriel (Société Alsacienne des Anneaux Raschig et le Gaz) industrial réunis, obtaining volatile products by distillation [e.g. of fuel] with superheated steam in a closed cycle, (P.), B., 351.

Geake, A. See Birwell, (Miss) C., and Clibbens, D. A.

Gebauer-Finngé, E. See Pollak, J.

Gebelein, F. See Abderhalden, E.

Gee, A. H., and Chaikoff, I. L., identification of acetaldehyde in normal blood, and its concentration in the blood of normal and diabetic dogs, A., 1179.

Geer, W. C. See Goodrich Co., B. F.

Gero, S. See Tröger, J.

Gehrcke, E., measurement of the fine structure of hydrogen lines with the Lummer-Gehrcke plate, A., 101.

Gehrcke, E., and Janicki, L., fine structure of xenon and krypton lines, A., 1071.

Gehrkens, K. A. See Karrer, P.

Gehring, soil acidity, B., 207.

Gehrke, M. See Schoeller, W.

Geib, M. N. V. See Bowker, R. C.

Geidel, J., and Rehwinkel, W., indirect determination of the calorific value of coal, B., 316.

Geiger, E., filtering waste water, (P.), B., 614*.

constitution of high polymerides, B., 681.

Geiger, E. See also Staudinger, H.

Geiger'sche Fabrik Gesellschaft, apparatus for separating solid substances from waste water and other liquids, (P.), B., 616*.

Geizy, J. K., Aktien-Gesellschaft, printing textile fabrics, (P.), B., 124.

Geizy, J. R., Aktien-Gesellschaft, and Chemische Fabrik Haltingen, Jucker & Co., tanning, (P.), B., 958.

Gelling, E. M. K. See Campbell, D.

Geilmann, W., detection of small amounts of silver and cadmium, A., 1019.

detection of cadmium and arsenic in glass, B., 877.

Geilmann, W., and Höltje, R., micro-chemical determination of lead, A., 691.

Gelpert, R., value of coal carbonisation products and its determination in the laboratory, B., 938.

Gelsenhänder, H., and General Electric Co., crucible [for molten metal], (P.), B., 736.

Geisler, E. W., and Corney Brooklyn Co., R. H., preparing straw braid for bleaching, (P.), B., 189.

Geiss, W., total radiation and specific resistance of tungsten at high temperatures, A., 461.

Geiss, W., and Lierpelt, J. A. M. van, conductivity changes during cold working [of tungsten] and their possible significance, B., 752.

Geissen, C. See Kohlenveredlung Ges.m.b.H., and Lesche, O.

Geissler, J., [limits of validity of gas equations], A., 670.

Geister, C. H., endurance of flooring materials, B., 643.

Geiter, C. W., determination of iodine in organic combination, B., 763.

Gelarie, A. J., and Greenbaum, F. R., gold sodium thiosulphate, A., 926.

instability of the sodium salt of benzoyl hydroperoxide, B., 384.

chaulinogra oil and its saponification, B., 802.

Gelbach, R. W., and Huppke, W. F., activity coefficients and transport numbers of barium bromide, A., 796.

Gelbke, M. See Sudholt & Co.

Geldrich, J. See Jendrassik, J.

Gelhaar, S. J., production of cyanamide solutions, (P.), B., 77.

Gelissen, H., and Hermans, P. H., organic peroxides. VIII. Further reactions which appear to proceed according to the R-H scheme, A., 63.

organic peroxides. IX. Hydrolysis (and aminolysis) of diacyl peroxides; iodometric determination of benzoyl peroxide, A., 296.

organic peroxides. X. Classification of reactions of acyl peroxides. XI. Action of benzoyl peroxide on cyclohexane, A., 612.

Gelissen, H. See also Böseken, J.

Gell, P. V. W. See Chance Bros. & Co., Ltd.

Geller, L. W., and National Aniline & Chemical Co., bisazo-dyestuffs containing a diphenylurea [diphenylcarbamide] nucleus, (P.), B., 867.

Geller, R. F., and Heindl, R. A., thermal expansion of saggar clays, B., 917.

Gelormini, O. See Essex, H.

Gelsenkirchener Bergwerks-Aktien-Gesellschaft, and Schütz, F., production of material containing sulphur [for use in the manufacture of printers' ink and lubricants], (P.), B., 866.

Gelsenkirchener Bergwerks-Aktien-Gesellschaft, Abt. Schalke, reduction of iron ores by means of methane or gases containing methane, (P.), B., 244.

Gelsenkirchener Bergwerks-Aktien-Gesellschaft, Abt. Schalke, and Caspari, F., production of low-boiling hydrocarbons from distillation gases, (P.), B., 574.

Gelsenkirchener Bergwerks-Aktien-Gesellschaft, Abt. Schalke, and Hock, H., separation of the acid fractions, in particular phenols, from mixtures with neutral oils, (P.), B., 148.

Gelsenkirchener Gussstahl & Eisenwerke Aktien-Gesellschaft Abt., Stahlwerke Krieger, and Raschke, B., steel alloys [for tools], (P.), B., 984.

Genberg, G. See McBain, B. T.

Genders, R., interpretation of the macrostructure of cast metals, B., 327, 792*.

General Abrasives Co. See Richmond, H. A.

General Chemical Co. See Egleson, J. E., and Isenberg, H. O. C.

General Electric Co., treating silicon steel sheets, (P.), B., 411.

General Electric Co., and Goldsmith, L. D., [edge] filters, (P.), B., 80.

General Electric Co., and Gossling, B. S., emission of electrons under the influence of intense electric fields, A., 418.

General Electric Co., and Hyslop, J. F., constitutional changes occurring in clays on heating, B., 157

General Electric Co., and Patent Treuhand Ges. für Elektrische Glühlampen, preparation of translucent rod-shaped bodies [incandescent bodies for electric lamps, artificial gems] from powdered material, (P.), B., 89.

manufacture of large [or single] crystals, (P.), B., 144.

manufacture of thin sheets of tungsten, tantalum, molybdenum, and other refractory metals, (P.), B., 370*.

gas-filled electric lamps, (P.), B., 415.

manufacture of alloys containing tungsten carbide, (P.), B., 635.

manufacture of glass, (P.), B., 716.

General Electric Co., Singleton, W., and Hare, A., electrodes for electric arc lamps, (P.), B., 413.

General Electric Co., and Smithells, C. J., manufacture of coated metallic conductors [thermionic cathodes], (P.), B., 19.

coated filaments for thermionic discharge tubes, (P.), B., 65.

electric resistance elements for incandescent lamps and thermionic devices, (P.), B., 793.

General Electric Co. See also Berry, E. R., Boyer, S., De Graaff, A., Dreher, G. F., Faccioli, G., Fonda, G. R., Force, J., Friederick, E., Fuller, T. S., Geisenhöner, H., Jones, C. E., Just, A., Kayko, C. J., Langmuir, I., Miller, L. B., Moore, R. W., Moss, S. A., Pacz, A., Seede, J. A., Steenstrup, C., Stein, T., Suzuki, E., Unger, M., Weed, J. M., and Wright, J. G. E.

General Engineering Co. See Genter, A. L.

General Engineering Co. (Radcliffe), Ltd., and Taylor, S., apparatus for separating moisture from gases in vacuum drying plants, (P.), B., 113.

General Metals Recovery Co. See Keith, E. W.

General Motors Corporation, fuels [for internal-combustion engines], (P.), B., 183.

General Motors Corporation. See also Hochwalt, C. A., Mead, B., and Midgley, T., jun.

General Motors Research Corporation. See Williams, H. M.

General Petroleum Corporation. See Prutzman, P. W.

General Reduction Gas & By-Products Co. See Broome, E. L.

General Rubber Co., drying [rubber] latex, (P.), B., 167.

General Rubber Co. See also Hopkinson, E.

Genevois, L. See Aubel, E.

Genevois, P. See Fleury, P.

Geniesse, J. C. See Leslie, E. H.

Genin, A. See Pringsheim, H.

Genot, C., identification of adaline, B., 75.

Gensecke, W. See Metallbank & Metallurgische Ges.

Genter, A. L., filtering and thickening process and apparatus, (P.), B., 424.

Genter, A. L., and General Engineering Co., thickening [filtering] process, (P.), B., 2*.

Gentil, A. J. See Waterman, H. I.

Gentner, R. See Gutbier, A.

Gentrup, J. H., vertical cone mills for grinding dry granular products, (P.), B., 424.

Gentsch, C., sodium bicarbonate in dry fire extinguishers, B., 391.

Georg, A. and Pictet, A., synthesis of gentiobiose, A., 602.

isomaltose, A., 823.

Georg, A. See also Pictet, A.

Georg, A., and Mathieson Alkali Works, manufacture of benzoic acid from benzotrichloride; manufacture of benzoyl chloride, (P.), B., 76.

George, E., phthalene direct from naphthalene, A., 1149.

George, H., manufacture of transparent silica glass, B., 360.

increasing the ultra-violet radiation from mercury vapour lamps made of quartz, (P.), B., 446.

George, W. & J. Ltd., and Smith, J. D. M., [analytical] crucibles, (P.), B., 650*.

Georgeacopol, E., violanthrone dyes from benzofluorenones, A., 840.

Georgi, C. D. V., oil from *Aleurites trisperis*, B., 1019.

oil from *Aleurites* species, B., 1020.

Georgi, C. D. V. See also Eaton, B. J.

Georgia, F. R., and Morales, R., detection of methanol [methyl alcohol] in alcoholic beverages, B., 381.

Georgieff, M., and Schmid, E., strength and plasticity of bismuth crystals, A., 666.

Gephart, F. C., and Cocoa Products Co. of America, refining oils and fats, (P.), B., 714.

Geppert, J., [lead-antimony] alloy, (P.), B., 590.

Gérard, A. B., stabilising the iron in mineral waters, (P.), B., 383.

Gérard-Vaudin, A., analysis of oil varnishes, B., 554.

Gerasimovic, H., ionisation equilibrium of a radiating atomic system, A., 1191.

Gerber, F., practical method for the determination of the electrical conductivity of milk, B., 845.

Gerbwerke & Farbstoffwerke H. Renner & Co. A.-G., rendering tanning [quebracho] extracts soluble in cold water, (P.), B., 891.

Gerten, H. See Siemens & Halske A.-G.

Gergonne, C., manufacture of abrasives, (P.), B., 158.

Gerhardt, W. See Weltzien, W.

Gerhardt, D., simple reaction to distinguish between cocaine and novocaine, A., 833.

Gerhardt, F. See Plagge, H. II.

Gericke, S., apparatus for the determination of hygroscopicity [of soils], B., 601.

Gerke, R. H. See Tingey, H. C.

Gerlach, influence of manuring with straw on the yield [of various crops], B., 139.

carbon dioxide manuring, B., 378.

Mitscherlich's method for determination of manurial requirement of soils, B., 600.

Gerlach, F., electrolysis of alkali chlorides, (P.), B., 284.

Gerlach, W., the magneton, A., 114.

magnetic properties of single crystals of iron, A., 230, 1085.

iron single crystals, A., 1196.

Germann, A. F. O., and Birosel, D. M., "phosgeno-aluminates" [chloroaluminates] of sodium, strontium, and barium, A., 35.

ebullition device for low-temperature and vacuum distillation, A., 142.

Germann, A. F. O., and Booth, H. S., thermal analysis of the system boron trifluoride-hydrogen sulphide, A., 475.

Germann, A. F. O., and Taylor, Q. W., critical constants and vapour tension of carbonyl chloride, A., 670.

Germann, A. F. O., and Timpany, C. R., calcium "phosgeno-aluminate" [chloroaluminate], A., 35.

Germann, F. E. E. See Traxler, R. N.

Germuth, F. G., determination of asbestos in lithopane paint, B., 21.

Gerngross, O., Bán, N., and Sándor, G., fluorescence, a method of detecting synthetic tannins in vegetable tanning extracts, B., 23.

Gerngross, O., Bán, N., and Sándor, G., use of filtered ultra-violet light for recognising and distinguishing natural and artificial tanning materials, B., 839.

Gerngross, O., and Gorges, R., determination of the degree of tannage [of leather] by means of the water-resistance test; influence of drying on the water-resistance of hide powder, B., 957.

effect of hydrogen-ion concentration and neutral salts on the intensity of formaldehyde tannage, B., 957.

Gerngross, O., and Katz, J. R., preparation of very strongly stretched gelatin and its X-ray diagram; gelatin and collagen, A., 793.

Gerngross, O., and Sándor, G., fluorescence test for natural vegetable tanning extracts in ultra-violet light, B., 334.

Gerngross, O., and Tsou, K., violet fluorescence of sulphite wood pulp and waste liquors, B., 911.

Gerngross, O. See also Katz, J. R.

Gero, W. B., and Westinghouse Lamp Co., alloying rare metals [tungsten and uranium], (P.), B., 190.

Gerosa, G. See Sandonini, C.

Gerr, W., and Popov, S., utilisation of ethylene obtained by cracking of petroleum for the production of alcohol, B., 803.

Gersch, H. See Rupp, E.

Gerson, K., treatment of household and street waste, (P.), B., 390, 728*.

Gerthens, C., possibility of excitation of X-rays by the collision of α -particles and positive rays, A., 655.

Gertschuk, M. See Engelhardt, W.

Gertz, O., oxydases of algae, A., 645.

Gertz, S., and Bartlett & Snow Co., C. O., drying mechanism, (P.), B., 568.

Gerum, J., determination of the density of milk, B., 1027.

Gesell, R., chemical regulation of respiration, A., 633.

Gesell, R. See also McGuire, D. A.

Gesellschaft für Chemie & Hüttenwesen, production of pure sulphides, (P.), B., 915.

Gesellschaft für Chemische Produktion. See Müller-Clemm, H., and Schmidt, Erwin.

Gesellschaft für hüttenmännische Verfahren m.b.H., purification of copper, (P.), B., 711.

Gesellschaft für Industrie-Ofenbau m.b.H., distillation of coal, (P.), B., 309.

Gesellschaft für Kohlentechnik m.b.H., production of sodium bicarbonate and sal ammoniac [ammonium chloride], (P.), B., 583.

Gesellschaft für Linde's Eismaschinen A.-G., recovery of neon and helium from the air, (P.), B., 322.

Gesellschaft für nautische Instrumente G.m.b.H., and Martienssen, O., [platinum-ruthenium] catalyst, (P.), B., 145.

Gesellschaft für praktische Geophysik m.b.H., detection of small amounts of firedamp with an electric mine-lamp, (P.), B., 182.

Gesellschaft für Wärmetechnik, and Ufer, A., purification of petroleum, benzine, and benzol hydrocarbons, their homologues, etc., (P.), B., 623.

Geslin, M. See Moureu, C.

Geslin, A., removal of iron skin from waste products of glass manufacture, (P.), B., 542.

Gessner, H., Wiegner's elutriation apparatus and its practical application, A., 377.

Getman, F. H., ultra-violet absorption spectra of aqueous solutions of sulphur dioxide and some of its derivatives, A., 452.

Gettings, S. S., Bodman, W. L., and Johnston, J. M. T., rotary drying apparatus, (P.), B., 34*.

Gouer, J. See Benrath, A.

Geurden, J., action of organo-magnesium compounds on nitriles; ketone cyanohydrins, A., 1025.

Gevers-Orban, E., carbonising ovoid briquettes in a vertical retort, (P.), B., 37.

Gewerkschaft Alfeld VH, reduction of ores, especially iron ores, (P.), B., 329.

Gewerkschaft Burbach, and Wiener, F., manufacture of thenardite and Glauber's salt, (P.), B., 192.

Gewerkschaft Einigkeit I, preparation of table salt from powdered rock salt, (P.), B., 238.

Gewerkschaft Lutz III, production of cement in blast furnaces, (P.), B., 193.

simultaneous production of cement and combustible gas, (P.), B., 193.

manufacture of sulphur dioxide and sulphuric acid from sulphur-bearing slag, (P.), B., 320.

Gewerkschaft Sachtleben, drying lithopone, (P.), B., 505.

Gewerkschaft Sachtleben, and Pützer, H., production of zinc sulphate from iron ores containing zinc sulphide, (P.), B., 52.

Gewerkschaft Walram Abt. Metallwerke, Voigtländer, H., and Kaufels, O., manufacture of homogeneous, ductile pieces of chemically pure metals of the tungsten group having a high melting point, e.g., tungsten, molybdenum, or uranium, and also of titanium and chromium, (P.), B., 754.

Gewiss, E. See Schwarz, C.

Geys, K., measurement of foam in beer and the factors which influence it, B., 961.

Ghigi, E. See Plancher, G.

Ghosal, S. C., condensation of α -hydroxy-aromatic aldehydes with ω -cyano-acetophenone, A., 1149.

Ghosh, B., parallelism between effect of neutral salts on electrical charge of hydrated manganese oxides and concentration of hydrogen ions liberated, A., 1203.

Ghosh, J. C., and Gupta, S., isomeric transformation of *allo*cinnamylideneacetic acid into the normal form with iodine as photo-catalyst, A., 400.

Ghosh, J. C., and Kappanna, A. N., decomposition of potassium manganoxalate in plane polarised, circularly polarised, and ordinary light, A., 1014.

Ghosh, J. C., and Purkayastha, R. M., photo-chemical reactions in circularly polarised, plane polarised, and ordinary light; velocity of reactions between bromine and (1) cinnamic acid, (2) stilbene, A., 306.

Ghosh, P. N., Banerji, D., and Datta, S. K., determination of surface tension by the method of ripples, A., 670.

Ghosh, P. N., and Mahanti, P. C., action of magnetic fields on the refractive index of gaseous carbon dioxide, A., 1194.

Ghosh, S., Bhattacharya, A. K., and Dhar, N. R., adsorption. XII. Explanation of positive and negative acclimatisation; influence of hydrolysis and of precipitating electrolytes on the coagulation of aqueous sulphide sols, A., 348.

Ghosh, S., Chakravarti, D. N., and Dhar, N. R., formation of gels of vanadium pentoxide and [stannic hydroxide], A., 670.

Ghosh, S., and Dhar, N. R., influence of ions carrying the same charge as the dispersed particles in the inversion of emulsions, A., 471.

adsorption. XIV. Influence of hydrogen ions on the stability of sols, A., 794.

adsorption. VI. Influence of the hydrolysis of sols and precipitating electrolytes on the coagulation of colloids, A., 1004.

Ghosh, S. See also Dhar, N. R.

Giaja, J., and Chahovitch, Y., action of enzymes on the sugar of the blood, A., 636.

Gianfranceschi, G., law of radiation, A., 991.

Giani, P. See Wever, F.

Gibbons, W. A. See Naugatuck Chemical Co.

Gibbons Bros., Ltd., and Masters, E., [gas] retort settings, (P.), B., 655*.

Gibbs, H. D., Cohen, B., and Camman, R. K., oxidation-reduction. VII. Dichloro-substitution products of phenol-indophenol, A., 60.

Gibbs, H. D., and Du Pont de Nemours & Co., E. I., making phthalic anhydride, (P.), B., 817.

exothermic catalytic reactions; [oxidation of naphthalene], (P.), B., 1029.

Gibbs, H. D., Francis, A. W., and Du Pont de Nemours & Co., E. I., process of making camphor, (P.), B., 932.

Gibbs, H. D. See also Clark, W. M.

Gibbs, R. C., and White, H. E., doublets of stripped atoms of the potassium type, A., 874.

rubidium- and cesium-like doublets of stripped atoms, A., 1071.

stripped atoms of the first long period, A., 1185.

Gibbs, R. C. See also Orndorff, W. R.

Gibbs, R. E., structure of a-quartz, A., 227.

Gibbs, R. E. See also Bragg, (Sir) W. H.

Gibbs, W. E., aerosols in industry, B., 727.

Gibbs, W. R. See Orndorff, W. R.

Gibon, F. See Mathus, L.

Gibson, C. S., Hariharan, K. V., Menon, K. N., and Simonsen, J. L., derivatives of naphthaquinolines and naphthalisoquinolines, A., 1154.

Gibson, C. S. See also Burton, H.

Gibson, D. T., Robertson, J. M., and Sword, J., oxidation of sesquiterpenes with chromyl chloride and chromic acid, A., 299.

Gibson, G. E., and Phipps, T. E., conductance of solutions of alkali metals in liquid ammonia and in methylamine, A., 360.

Gibson, G. H. See Cochrane Corporation.

Gibson, G. P., monochloro-derivatives of *m*-cresol, A., 832.

Gibson, J., [oil] gas generator, (P.), B., 862.

Gibson, K. S., spectral filters, A., 1117.

Giekhorn, J., Fürl, R., and Blüh, O., adsorption and diffusion in an electric field, A., 1092.

Giekhorn, J. See also Keller, R.

Gidden, W. T., Ragg, W. G., and Chance & Hunt, Ltd., treating crude oxide and carbonate of zinc, (P.), B., 440*.

Giddings, G. W., and Rouse, G. F., ionisation of mercury vapour as a function of the intensity of the exciting light, A., 876.

Giedroc, W., is oxyproteic acid a ureide? A., 636.

Giemsa, G., and Tropp, C., synthesis of polypeptide-like derivatives of arsanilic acid, A., 1162.

Gierth, M. See Bergmann, M.

Giertsen, S., and Kristiansands Nikkelraffineringsverk, separation of metals [copper and nickel], (P.), B., 370.

Giesecke, F. See Blanck, E.

Gieseler, H., and Grotian, W., structure of the arc spectrum of lead, A., 1186.

Gifford, W. S. See Campbell, D. F.

Gigon, A., action of insulin and pituitary extract on constituents of blood, A., 1063.

Gilbert, E. C., m. p. of 4-chloro-2:6-dibromoaniline, A., 1030.

Gilbert, E. C. See also Harkins, W. D.

Gilbert, M., Schneider, H., and Bock, J. C., blood-sugar, A., 635.

Gilbert, M. See also Bock, J. C.

Gil-Campori, E. See Schwartz, F.

Gilchrist, H. L., chlorine gas treatment for respiratory diseases, A., 637.

Gilchrist, H. S., and Purves, C. B., glycerol glucoside, A., 153.

Gilchrist, W. A., utilisation of heat in evaporation processes, (P.), B., 855.

Giles, F. L., and Smith, J. G., colloidal silica and the efficiency of phosphates [as plant nutrients], B., 168.

Gilkey, W. A., calcination rates of limestone, B., 707.

Gill, A. H., and Gill, H., possible tests for the oiliness of oils, B., 620.

Gill, H. See Gill, A. H.

Gill, J. P., and Frost, M. A., chemical composition of tool steels, B., 828.

Gill, R. See Collins, S. H.

Gille, H., absorption of chemical fogs; determination of sulphur trioxide in moist burner gases, B., 437.

Giller, F. See I.G. Farbenind. A.-G.

Gillespie, L. J., mass action equation for condensed gases, with application to Haber equilibrium data, A., 244.

Gillespie, L. J., and Hall, F. P., palladium-hydrogen equilibrium and palladium hydride, A., 682.

Gillet, J. M., and Goodyear Tire and Rubber Co., vulcanisation of caoutchouc, (P.), B., 138.

Gillette, R. T. See British Thomson-Houston Co., Ltd.

Gilligan, F. P., and Curran, J. J., macroscopical examination of iron and steel, B., 919.

Gilliland, W. L., and Blanchard, A. A., nickel carbonyl, carbon monoxide, and Grignard reagents, A., 603.

Gilliland, W. L. See also Blanchard, A. A.

Gillot, P., seeds of *Euphorbia helioscopia*, L., B., 758.

Gilman, E. See Hahn, D. A.

Gilman, H., and Adams, C. E., reaction between organic peroxides and organo-magnesium halides, A., 63.

mechanism of the reduction of azobenzene by magnesium organohalide, A., 947.

Gilman, H., and Kirby, J. E., reaction between magnesium benzhydryl chloride and methyl sulphate, A., 944.

β -xenylhydroxylamine and its rearrangement, A., 1029.

Gilman, H., and Meyers, C. H., determination of the Grignard reagent, A., 535.

Gilman, H., and Morris, H. L., reaction between thiophenylamine and organo-magnesium halides, A., 1132.

Gilman, H., and Peterson, J. M., electronic interpretation of the ethylenic linking, A., 495.

Gilman, H., Robinson, J., and Beaber, A. J., reaction between organomagnesium halides and the esters of some sulphur acids, A., 1239.

Gilman, H., and Schulze, F., organocalcium iodides, A., 1130.

Gilman, H., and Vernon, C. C., reaction between organomagnesium halides and the aryl esters of boric, carbonic, silicic, and phosphoric acids, A., 718.

Gilman, H., and Wood, A., oxidation of magnesium aryl halides, A., 507.

Gilmore, R. E., and Swinnerton, A. A., development of a standard Canadian laboratory distillation method for examination of oil shale, B., 116.

Gilmore, R. E. See also Haanel, B. F.

Gilson, E. G., some factors affecting lubrication, B., 615.
 Gimberg, L. D., and Baily, M. H., preparation of lakes from organic dyestuffs, (P.), B., 167.
 Gimberg, L. D., See also Levy, I.
 Glinneken, P. J. H. van. See Aten, A. H. W.
 Glaubach, J. M., and Shive, J. W., influence of calcium and nitrogen on the protein metabolism of the soya bean plant, B., 959.
 Giordani, F., and Pomilio, U., production of alumina and potassium salts from leucite rocks, (P.), B., 538.
 Giordani, F., See also Pomilio, U.
 Giran, H. See Flusin, G.
 Girard, A., and Fourneau, E., separation and determination of bismuth, A., 141.
 Girard, A. See also Levadit, C.
 Girard, A. V. A., purification of industrial effluents containing nitrogen, (P.), B., 774.
 Girard, P., mode of action of proteolytic enzymes, A., 757.
 Girard, R., action of solutions of salts on ferrous metals, A., 326.
 corrosion and rusting of steel and iron, B., 881.
 Girardin, R., and Spach, E., gravimetric micro-determination of cholesterol, A., 1283.
 Gire, O., thermal decomposition of chloro-salts of metals of the platinum group; thermal decomposition of chloro-salts of metals of the platinum group; calorimetric investigations, A., 27.
 Giraldo, D., expression for the true reaction of solutions, A., 125.
 Girin, P., and Société Anonyme de Commentry, Fourchambault et Decazeville, alloy, (P.), B., 233*, 445*.
 Girzewald, C. von. See Metallbank & Metallurgische Ges.
 Girvin, C. W., and Petroleum Refining Co. of California, centrifugal dehydrator [for oil emulsions], (P.), B., 148.
 Giella, A. See Charrier, G.
 Gittelman, I. See Holt, L. E., jun.
 Giua, M., action of cyanamide on picryl chloride, A., 59.
 influence of substituents on the formation and the stability of some cyclic compounds, A., 60.
 Giua, M., and Guastalla, G., azoxybenzenes and aromatic nitro-derivatives. VII. Organic molecular compounds, A., 61.
 Giua, M., and Petronio, R., action of thiosemicarbazide on certain aromatic nitro-compounds, A., 62.
 Giua, M., and Reggiani, G., azo-compounds and aromatic nitro-derivatives. VIII. Organic molecular compounds, A., 61.
 Giua, M., and Thümmler, L., pyrogenic dehydration of fusel oil, B., 687.
 Giuffré, U. See Romeo, G.
 Given, G. C., artificial leather [during the past fifty years], B., 839*.
 Givens, M. H. See Hill, C. B.
 Gläser, H. See Rosenheim, A.
 Blair, H. F., Bransky, O. E., and Standard Oil Co., removing wax from [petroleum] oil, (P.), B., 576.
 Glaister, J., Kastle-Meyer test for blood, A., 1165.
 Glancy, W. E., Wright, D. D., and Oon, K. H., rate of combination of sulphur with rubber in hard rubber [vulcanite], B., 201.
 Glanville, W. H., permeability of Portland cement concrete, B., 717.
 Glanzmann, E., disturbances in calcification in rickets, A., 637.
 Glaser, A., anomalies observed in the magnetic properties of gases, A., 230.
 Glaser, E., and Halpern, O., chemical composition of insulin, A., 97.
 activation of insulin, A., 1278.
 Glaser, E., and Prinz, F., bactericidal power of enzymes, A., 1275.
 Glaser, E., and Thaler, A. C., influence of the acid character of the polynitro-phenols and nitronaphthalols on their capacity for forming glucosides, A., 603.
 Glaser, F., analysis of argol and raw materials containing tartaric acid, B., 210.
 presence of arsenic in burner gasses and its bearing on "Haff disease," B., 358.
 Glaser, J., lactic acid content of cerebrospinal fluid, A., 1052.
 Glaser, L. C., and Seeman, H. J., phosphor-bronze; thermal analysis of the system copper-phosphorus-tin, B., 411.
 Glaser, O., thermal and microscopical investigations of the cupola furnace slag systems $MnO-Al_2O_3-SiO_2$, $MnS-MnSiO_3$, and $CaS-CaSiO_3$, B., 753.
 Glasgow, A. G. See Humphrey & Glasgow, Ltd.
 Glasgow, R. See Corby, R. L.
 Glas, M. S., variation with temperature of the work-function of oxide-coated platinum, A., 1074.
 Glass, S. W. See Forbes, G. S.
 Glasser, O. See Fricke, H.
 Glassott, J. W. See Rawling, S. O.
 Glassmann, B., physiology of blood sugar and its colorimetric determination, A., 192.
 physiology of blood sugar and its colorimetric determination. II. Free and protein sugar in plasma and corpuscles of normal and diabetic individuals; mechanism of insulin hypoglycemia, A., 1169.
 Glassstone, S., and Biggs, E. J., complex formation in lead nitrate solutions. II. Quaternary system potassium nitrate-lead nitrate-barium nitrate-water, A., 126.
 Glassstone, S., and Pound, A., solubility influences. I. Effect of some salts, sugars, and temperature on the solubility of ethyl acetate in water, A., 18.
 Glaubach, S., cyanamide poisoning. I. Chemical point of attack of cyanamide, A., 1274.
 Glaubach, S., and Pick, E. P., action of choline and of a choline ester on the blood pressure after removal of the suprarenal glands, A., 200.
 Glaubitz, M., volutin in yeast cells, B., 25.
 souring of potatoes, B., 510.
 Glawie, H. See Meisselheimer, J.
 Gleason, M. See McDonald, J. F.
 Gleitsch, (Mile) E., and Chamie, (Mile) C., chemical properties of mesothorium-2 and actinium, A., 332.
 Gleich, O. ion, change of mass in the two-body problem, A., 555.
 Glencoe Lime & Cement Co. See Gruetzmacher, H. F., jun.
 Gleu, K., emission of light by the decomposition of chloroazotimide, A., 992.
 Glidden Co. See O'Brien, W. J.
 Glimm, E., and Wadchn, F., placental hormone, A., 326.
 Glixelli, S., and Denlszczukovna, (Mile), preparation and properties of antimonic acid solutions, A., 371.
 Glockenstahlwerke Aktien-Gesellschaft vorm. R. Lindenber, heat treatment of high-speed steel for the manufacture of permanent magnets, (P.), B., 61.
 Glocker, R., Kaupp, E., and Wldmann, H., recrystallisation of rolled silver sheet, B., 15.
 Glockler, G., diffusion of electrons, A., 448.
 resonance potentials of helium and double impacts by electrons in helium, A., 552.
 ionisation potential of methane, A., 993.
 electrical conductivity of liquid cyanogen bromide, A., 997.
 Glorient, Inc. See Matthews, J. M.
 Glover, R. E., jun., Rogers, T. H., and Du Pont de Nemours & Co., E. I., treating crude cyanide, (P.), B., 665.
 Glover, W. H., and Courtaulds, Ltd., manufacture of threads, filaments, strips, or films from cellulose ethers, (P.), B., 1010*.
 Glover, W. H. See also Courtaulds, Ltd.
 Glücksmann, E., stable alkali polysulphide solutions, (P.), B., 237.
 preparation of stable alkaline-earth polysulphide solutions, (P.), B., 915.
 Glund, W., removing hydrogen sulphide from gases, (P.), B., 908*.
 Glund, W., Keller, K., and Klemp, W., preparation of aqueous thiocyanic acid, A., 943.
 decomposition of ammonium thiocyanate into carbon disulphide and mellon, and decomposition of mellon into ammonia and carbon dioxide, B., 1011.
 Glynn, M. See Ryan, H.
 Gnadinger, B., piperonal in vanilla extract, B., 689.
 Go, T., adrenaline content of the suprarenals of birds during beri-beri (polyneuritis gallinarium), A., 1270.
 Goar, A. S. See Bernoulli, A. L.
 Goard, A. K., negative adsorption; surface tensions and activities of some aqueous salt solutions, A., 20.
 Godard, J. S. See Timms, W. B.
 Godbole, M. N. See Holde, D.
 Godchet, M., and Bedos, P., stereoisomerism in the cyclohexane series. I. 2:5-Dimethylcyclohexan-2-one, A., 164.
 chloro-1-methylcyclohexan-2-one, A., 169.
 stereoisomerism in the cyclohexane series. II. 2:5-Dimethylcyclohexanols and 2:5-dimethylcyclohexanone, A., 280.
 stereoisomeric *o*-methylcyclopentanols, A., 334.
 stereoisomerism in the cyclohexane series. III. Chlorination of inactive *m*-methylcyclohexane; constitution of some disubstituted derivatives of cyclohexanol, A., 335.
 Godden, W., mineral content of pasture grass and its effect on herbivora. III. Analyses of samples of British pastures, B., 251.
 mineral content of pasture grass and its effect on herbivora. V. Effect of fertilisers on mineral content of soils, B., 251.
 Godnev, T. N., structural formula of chlorophyll and haemin in relation to the synthesis of complex pyrrole derivatives, A., 183.
 Godnev, T. N., and Naryschkin, N. A., dye formed by the action of ethyl oxalate on magnesium pyrrol bromide, A., 183.
 Godowsky, L., jun. See Mannes, L. D.
 Goebel, H. See Chem. Fabr. auf Aktien vorm. E. Schering.
 Goebel, W. F. See Heidelberger, M.
 Goedecke, C. E. J., and Colloidal Colour Co., Ltd., production of dyestuff emulsions, (P.), B., 234.
 Gönnigen, F. See Remy, R.
 Goens, E. See Grineisen, E.
 Görnandt, W. See Vorländer, D.
 Görnitz, K. See Chem. Fabr. auf Aktien vorm. E. Schering.
 Goertz, M. See Obermiller, J.
 Goetschins, D. M., Vogt, L. F., and Standard Chemical Co., filter, (P.), B., 423.
 Göttler, M. See Thomä, K., Chem. Fabr.
 Goetz, A., micro-pyrometer eye-piece, A., 932.
 Götz, G., coating aluminium with a strongly-adherent film of copper, (P.), B., 63.
 Goetzmann, F. O., manufacture of Portland cement and sulphuric acid, (P.), B., 276.
 Goff, J. A., chemical reactions in the gas producer, B., 617.
 Goffredi, E. See De Conno, E.
 Goggin, J. F., Cronin, J. J., Fogg, H. C., and James, C., metallic uranium, B., 214.
 Gohin, J., manufacture of anhydrous chlorides, (P.), B., 538.
 Golffon, R., measurement of surface tension, A., 790.
 Goissedet, P. E., Husson, A. L., and Société Chimique des Usines du Rhône, manufacture of phosphoric esters of polyhydric alcohols, (P.), B., 964.
 Goldblatt, M. W., effect of various carbohydrates on the ketosis of starvation in human subjects, A., 198.
 Goldenberg, A. M., analytical standards for leather manufacture, B., 334.
 Goldener, E. See Abelin, I.
 Golding, J., and Stead, J. C., evaporating apparatus, (P.), B., 471.
 Goldman, H., tartrylaminin of S. Hajdu, A., 423.
 citrylaminin, A., 553.
 Goldscheider, I. See Mendel, B.
 Goldschmidt, F., distillation of [benzol] wash oil, (P.), B., 39.
 Goldschmidt, F. See also Tieke, E.
 Goldschmidt, H., and Aarflot, H., conductivity measurements in mixtures of methyl and ethyl alcohols, A., 477.
 viscosities of solutions in ethyl and methyl alcohols, A., 1005.
 Goldschmidt, H., and Mathiesen, E., alcoholysis of salts of weak acids and weak bases in ethyl and methyl alcohol, and dissociation constants of basic ions, A., 577.
 conductivity and catalytic activity of hydrogen halides in *n*-butyl alcohol, A., 586.
 Goldschmidt, H., & von Vierlinghoff Chemisch-technische Ges. m.b.H., preparation of carbamide from cyanamide, (P.), B., 852.
 Goldschmidt, S., and Beuschel, W., amino-oxidation. X. Oxidation of aliphatic amines and amino-acids, A., 607.
 Goldschmidt, S., and Schön, W., mechanism of the Wurtz-Fischer synthesis, A., 721.
 Goldschmidt, T., Akt.-Ges., bearing metal alloys of high lead content, (P.), B., 62.
 bearing metal alloys with bronze foundation, (P.), B., 331, 590.
 improving zinc-aluminium alloys, (P.), B., 885.
 Goldschmidt, T., Akt.-Ges., Häggland, E., and Färber, E., treatment of condensate obtained by distillation of carbohydrate solutions containing hydrochloric acid, (P.), B., 295.
 Goldschmidt, T., Akt.-Ges., and Schertel, L., smelting tin ores, (P.), B., 64.
 Goldschmidt, T., Akt.-Ges., Weber, J., and Erasmus, P., producing methyl alcohol and methylene chloride from methane, (P.), B., 109*.
 Goldschmidt, V. See De Klerk, A.
 Goldschmidt, V. M., [X-ray analyses. II.], A., 936.

Goldschmidt, V. M., Ulrich, F., and Barth, T., geochemical distribution of the elements. IV. Crystalline structure of the oxides of the rare-earth elements, A., 228.

Goldschmidt, H. E. See Rhodes, F. H.

Goldschmidt, L. D. See General Electric Co.

Goldschmidt, M. M., alloy for pen-points, (P.), B., 245.

Goldstein, H., and Radovanovitch, H., 1-amino-4-anilino- β -naphthol, A., 1134. azoxines, II., A., 1159.

Goldstein, H., and Rodel, W., derivatives of phenylanthranilic acid. I., A., 1138. carbazine syntheses. I., A., 1161.

Goldstein, H. See also Kehrmann, F.

Goldstein, R. F. See Brady, O. L.

Goldsworthy, L. J., reactivity of alkyl iodides with sodium benzyl oxide, A., 691. velocities of the reactions between ethyl iodide and the sodium salts of various substituted phenols in ethyl-alcoholic solution, A., 805.

Goldthorpe, W. O. See British Celanese, Ltd.

Goll, O. See Braun, J. von.

Gollwitzer-Meier, K., buffering properties of serum proteins, A., 86. detection of variation in acid content of blood, A., 1050.

Gollwitzer-Meier, K. See also Straub, H.

Golstein, E., treatment of hydrocarbons, (P.), B., 526.

Golubev, B. A. See Bobkov, E. V.

Gomberg, M., elements with anomalous valencies, A., 111.

Gomberg, M., and Fernet, J. C., methylidiphenyl, A., 944.

Gomberg, M., and Tabern, D. L., triphenylmethyl. XXXV. Halogen-substituted acridines; reactivity of the halogen in them, A., 738.

Gomez, J. S., comparative analyses of the milk of carabao and Indian buffalo, A., 1269.

Gomez, L., carbon-nitrogen quotient of blood under normal and experimentally pathological conditions, A., 425.

Gomperz, E. von. See Frey, W.

Gonder, K. L. See Chem. Fabr. Griesheim-Elektron.

Gonell, H. W., X-ray examination of chitin, A., 563.

Gonell, H. W. See also Herzog, R. O.

Gonnerman, H. F., effect of size and shape of test specimen on compressive strength of concrete, B., 91.

Gonnerman, H. F., and Mackesson, C. L., curing concrete in a semi-arid climate, B., 14.

Gonser, K. See Bauer, K. H.

Gonzalez, A., stereoisomerism of ethylenic acids; hydrogenation of stearolic and behenic acids, A., 712.

Good, W. See Cumming, W. M.

Goodbody, See Richet, C.

Goodell, E. G. See White, A. H.

Goodell, R. A. See Fliske, C. H.

Goodman, R. A. See Chapman, D. L.

Goodner, K. See Downs, C. M.

Goodrich, R. J., and Newport Co., anthracene dye, (P.), B., 577.

Goodrich, R. J. See also Gubelmann, I.

Goodrich Co., B. F., heat-plastic materials [from rubber], (P.), B., 453.

Goodrich Co., B. F., and Gammeter, J. R., pulverisers; [rubber lining for ball mills], (P.), B., 32.

Goodrich Co., B. F., and Geer, W. C., [rubber] adhesives, (P.), B., 708.

Goodrich Co., B. F. See also Dales, B., Dickson, J. B., and Winkelmann, H. A.

Goodwin, C. J., and White, G. N., binders for briquetting, with special reference to "pulp binders," B., 34.

coloration of cement, concrete, and other building materials, B., 918.

Goodwin, H. See British Dyestuffs Corporation, Ltd.

Goodwin, H. B., and Latimer Chemical Co., arsenate of lead [insecticide], (P.), B., 507.

Goodwin, L. F., equilibrium in the causticising process, I., B., 977.

Goodwin, L. F., and Sills, I. L., effect of additions of sodium sulphide on the causticising equilibrium. II., B., 977.

Goodwin, W., and Martin, H., lime-sulphur-calcium arsenate spray, B., 990.

Goodwin, W., Martin, H., and Salmon, E. S., fungicidal properties of certain spray fluids. IV., B., 506.

Goodyear Tire & Rubber Co. See Gillet, J. M., O'Brien, W. G., Sebrell, L. B., Shaw, D. M., and Spear, E. B.

Goos, F., and Meyer, H., intensity of the resonance radiation of mercury vapour, A., 334.

Goralnowna, C. See Chrzaszcz, T.

Gorbatschew, A., derivation of adsorption isotherms, A., 119.

Gordon, A., and Lipman, C. B., why are serpentinite and other magneisian soils infertile? B., 1024.

Gordon, A. R., and Weber, C., concentration E.M.F. in solutions containing acid, A., 30.

Gordon, B. See Cantarow, A.

Gordon, G. G., disinfectant composition, (P.), B., 998.

Gordon, H. B., [laboratory] filtering devices, B., 967.

Gordon, J., Whitehead, H. R., and Wormald, A., action of ammonia on complement: the fourth component, A., 1166.

calcium and complement action, A., 1166.

fourth component of complement and its relation to opsonin, A., 1166.

Gordon, P. F., Baird, D., and Hunter, T. G., separation of the components of petroleum: bromination of Persian petroleum fraction, b. p. 60-80°, B., 260.

Gordon, S. G., penroseite and trudellite, two new minerals, A., 709.

Gordon, W., contraction [of cellulose fibres] on mercerisation, B., 627.

Gore, H. C., and Fleischmann Co., production of maltose from starchy materials, (P.), B., 458.

Gorges, A. See Holde, D.

Gorges, R. See Gerngross, O.

Gori, G., derivatives of amantansin [ethyl ρ -aminobenzoate], A., 1037.

Gorini, C., action of typhoid bacillus on milk, A., 1278.

action of streptococci on milk, B., 418.

Gorini, L., and Dani, A., action of dyestuffs on the sensitivity of silver bromide-gelatin, B., 219.

Gorini, L. See also Charrrier, G.

Gornall, F. H., and Robinson, R., 2:3:4-trinitrotoluene, A., 1028.

Gorodissky, H., chemical topography of the brain. I. Lipins and total nitrogen of the human cortex, A., 194.

Gorodissky, H. See also Tscherkess, A.

Gorowara, F. C. See Hodgson, H. H.

Gorr, G., and Perlmann, G., formation of lactic acid from methylglyoxal by ketone-aldehyde mutase of animal and vegetable origin, A., 1059. action of oxygen on the alcoholic fermentation of sugar, A., 1061.

Gorr, G., and Wagner, J., separation of ethyl alcohol from acetaldehyde or acetone, A., 189.

Gorr, G. See also Eisenlohr, F., and Neuberg, C.

Gorter, E., and Grendel, F., muscular contraction, A., 539.

spreading of oxyhaemoglobin, A., 790.

bimolecular layers of lipins on the chromatocytes of the blood, A., 855.

spreading of different lipins from chromatocytes of different animals, A., 855.

spreading of proteins, A., 1034.

Gortner, R. A., and Hoffman, W. F., binding of acid and alkali by proteins, A., 631.

Gorton, A. F., and Groves, W. H., new type of oxy-acetylene fusion furnace, with notes on the behaviour of refractories at cone 10, B., 127.

Goskar, T. A., manufacture of fuel briquettes, (P.), B., 6°.

Goske, A., determination of the ash-content of flour, B., 235.

Goss, F. R., and Ingold, C. K., possible enhanced activity of newly-formed molecules, A., 289.

formation of unsaturated and cyclic compounds from halogenated open-chain derivatives. IX. Products derived from suberic and azelaic acids, A., 820.

Goss, F. R., Ingold, C. K., and Wilson, I. S., nature of the alternating effect in carbon chains. VIII. Nitration of some benzylamine derivatives with special reference to the respective roles of the ions, salts, and bases, A., 1132.

Goss, M. J. See Phillips, M.

Gosling, B. S. See General Electric Co.

Gossmann, B., chemical constitution of the monoclinic pyroxenes and amphiboles, A., 595.

chemical composition of alkali amphiboles, A., 595.

chemical composition of croscite, arfvedsonite, enigmatite, rhonite, and babilongonite, A., 595.

Goto, K., sinomenine and dehydrosinomenine, A., 1160.

Hofmann's decomposition of sinomenine, A., 1160.

Goto, K., and Osawa, N., comparison of Bang's and Benedict's methods of blood-sugar determination, A., 984.

Gottla, A. See Sieverts, A.

Gottifred, S., and Ulzer, F., myrcyl alcohol [from carnauba wax], B., 713.

Gothell, A. H. See Baekeland, L. H.

Gottlieb, E., presence of cyanato in blood, A., 421.

Gottlob, M., analysis of resin size, B., 314.

Gottschalk, A., synthesis and fermentation of glycogen by maltase-free yeast, A., 541.

biochemical synthesis of fuuic acid from pyruvic acid, A., 545.

yeast amylase and the fermentation of polysaccharides, A., 759.

Gottschalk, A. See also Lundsgaard, C., Neenberg, C., and Steudel, H.

Gottschalk, V. H. See Hamill, G. K.

Goucher, F. S., plastic deformation of single metallic crystals, A., 891.

deformation of tungsten single crystals, B., 710.

Goudet, C. See Breslauer, J.

Goudsmit, S., and Uhlenbeck, G. E., coupling possibilities of the quantum vectors in the atom, A., 333.

Goudsmit, S. See also Uhlenbeck, G. E.

Gough, G. A. C., Hunter, H., and Kenyon, J., alcohols of the hydroaromatic and terpene series. V. Geometrical and optical isomerism of the methylcyclohexanols, A., 1032.

Gough, H. J., Hanson, D., and Wright, S. J., behaviour of single crystals of aluminium under static and repeated stress, A., 666, 987.

Gould, C. E. See Chance Bros. & Co., Ltd.

Gould, E. C. See Wilkins, S. D.

Gounder, A., and Roll, (Mme.) C., heats of combustion of amionopyrroles and 1:2-diazines, A., 1156.

Goutal, E., and Hennebette, H., manufacture of building material and of moulded active carbons, (P.), B., 732.

agglomerated combustible products, (P.), B., 812.

Govers, F. X., preparing adsorptive siliceous material, (P.), B., 53.

heating method and apparatus, (P.), B., 650.

heat treatment of chemical compounds, (P.), B., 650.

Goy, S., and Janisch, J., amyl alcohol unsuitable for milk testing by Gerber's method, B., 257.

Grabfield, G. P., and Prentiss, A. M., effect of iodides on the nitrogen partition, A., 756.

Gracanin, M., action of catalase in autotrophic plants, A., 432.

Gracanin, M. See also Nemec, M.

Gradenwitz, F., danger of mercury vapour, A., 815.

Grady, C. B. See Engelhart, G. K.

Graef, R., and Aktien-Gesellschaft für Ozon-Ind., cooling the electrode in ozonisers, (P.), B., 332°.

Gräfe, R. See Rinne, F.

Gränačer, C., anhydrides of amino-acid derivatives, A., 79.

alcoholytic cleavage of proteins, I., A., 84.

Gränačer, C. Ofer, A., and Klopfenstein, A., use of rhodanine in organic syntheses. VI. Quinobiolide, A., 81.

Gränačer, C. Schalling, V., and Schlatter, E., anhydrides of amino-acid derivatives, A., 78.

Graesser-Monsanto Chemical Works, Ltd. See Maxwell-Lefroy, H.

Grässer-Thomas, F. R., Gilliland, J. M., and Robinson, R., derivatives of homocatechol, I., A., 1035.

Grafé, V., and Magistris, H., plant phosphatides. II. Water-soluble phosphatides of *Aspergillus oryzae*, A., 99.

plant phosphatides. IV. Relation between vitamin action and surface activity of phosphatides, A., 1279.

plant phosphatides. III. Water-soluble and -insoluble phosphatides from *Pisum sativum* unicolor, A., 1280.

Grafton, H. T., and Weesner, C. W., annealing iron articles, (P.), B., 283.

Grafton, H. T., Weesner, C. W., and Hoffman, F. J., apparatus for purifying gas, (P.), B., 262.

Graham, C., crystallisation of sugar, (P.), B., 844.

Graham, G. S., and MacCarty, S. H., application of the Heuch-Aldrich urea index to the cerebrospinal fluid, A., 1162.

Graham, R. N. See Eldred, B. E.

Graham, W. A. P., origin of phosphate deposits, A., 1119.

Graham, W. E. See Clark, R. H.

Graham, W. F., and United States Industrial Alcohol Co., nickel-copper alloy, (P.), B., 63.

Gram, T. See Soderlund, O.

Grandadam, R. See Hackspill, L.

Grandchamp, L. See Wolff, J.

Grandperrin, M. See Delépine, M.

Grandsire, A. See Colin, H.

Granger, J., Mariller, C., and Prache, C., distilling volatile products [mineral oils], (P.), B., 264*.

Granier, J. See Cabannes, J.

Granitite Manufacturing Co., and Thompson, H. J., composition of matter hardened by metal chlorides, (P.), B., 14.

Grant, A. L., water purifier, (P.), B., 618.

Grant, F. M. See Meigs, E. B.

Grant, R. See Penfold, A. R.

Grant, W. M., and Illinois Anthracite Corporation, combined spreading and scraping mechanism for distillation apparatus, (P.), B., 345.

Grantham, J., periodic tapping of *Hevea* [rubber trees]. I. Experimental basis of periodical tapping, B., 137.

Grantron, L. E., utilisation of waste material from de-inking of paper in making paper, (P.), B., 10.

de-inking printed paper, (P.), B., 534*.

Granvigne, C., colloidal silica and silicates in agriculture, B., 1024.

Grard, C., influence of the thermal zone of working on the selection of steels for the valves of aeroplane engines, B., 92.

influence of the thermal zone of work on the selection of metals for aviation motors; application to exhaust valves, B., 672.

Grasselli Chemical Co., sulphur burners, (P.), B., 789*.

Grasselli Chemical Co., and Boertlein, J. C., [sulphur dioxide for] sulphuric acid process, (P.), B., 12.

Grasselli Chemical Co. See also Boertlein, J. C., Eichwede, H., Grine, H. A., Hoff, C. M., Howald, A. M., Howard, H., Schwitzer, W. K., and Tanner, W. L.

Grasselli Dyestuff Corporation. See André, F., Duisberg, B., Herz, R., Hoffa, E., Homolka, B., Krinzelb, G., Mieg, W., Müller, C. E., Muth, F. B. F., Rössner, H., Schmidt, R. E., Vossen, B., and Wagner, H.

Grassi, G. See Marchot, W.

Grassmann, W. See Waldschmidt-Leitz, E., and Willstätter, R.

Gran, C. A., destruction of organic matter by hydrogen peroxide, A., 983.

determination of added water in wines, B., 768.

Grau, G., protection of wood from natural discolouration, (P.), B., 319.

Graubner, V., continuous production of fatty acids, glycerin, and ammonium sulphate, (P.), B., 332.

Graubner, W. See Veil, W. H.

Graud, A., electric furnace, (P.), B., 164.

Gravel, J. H., rust-proofing bath for iron and steel, (P.), B., 329.

Gravino, P., antimonite from Wollfsberg (Harz), A., 709.

Gray, A. E., and Marvel, C. S., stability of hexa-substituted ethanes, A., 43.

Gray, A. E. See also Fisher, H. L.

Gray, A. S., absorption refrigerating machines, (P.), B., 114*.

Gray, G. P., and De Ong, E. R., petroleum insecticides, B., 293.

Gray, H. H. See Dietrich, E. O., and Fisher, H. L.

Gray, H. H. le B., constitutional formula for cellulose, A., 1026.

Gray, H. H., influence of nitrogen on the solubility of ferrous materials in hydrochloric acid, B., 919.

Gray, J. E. See Hall, F. G.

Gray, J. A., transformation of the energy of cathode or β -rays into energy of X-rays, A., 1076.

scattering and absorption of γ -rays, A., 1076.

Gray, T. T., purification of hydrocarbons, (P.), B., 230.

chromium soap, (P.), B., 287.

Great Western Sugar Co. See Dahlberg, H. W., and Shafor, R. W.

Greaves, H. J., washing apparatus for granular material, (P.), B., 145*.

Greaves, J. E., changes in flour during storage, B., 815.

Greaves, J. E., and Hirst, C. T., influence of storage on the composition of flour, B., 845.

Greaves, J. E., and Nelson, D. H., influence of irrigation water and manure on the composition of the maize kernel, B., 102.

Greaves, R. H., and Jones, J. A., effect of temperature on the behaviour of iron and steel in the notched-bar impact test, B., 162*.

effect of temperature on the behaviour of metals and alloys in the notched-bar impact test, B., 328*.

ratio of tensile strength of steel to the Brinell hardness numbers, B., 491. 883*.

Grebe, J. J., direct measurement of the velocity of migration of ions in a solution, A., 1104.

Grebenshchikov, J. V. See Pushin, N. A.

Green, A., action of thionyl chloride on hydroxyanthraquinones. II. Quinizarin, A., 839.

action of thionyl chloride on hydroxyanthraquinones. III, A., 1041.

refrigerating apparatus, (P.), B., 114*.

Green, A. G., manufacture of oxidation products of aromatic hydrocarbons [phthalic acid, anthraquinone] by air oxidation, (P.), B., 480.

Green, A. T., effect of industrial usage on the thermal conductivity of a semi-silica material used in a coke-on-wall, B., 947.

temperature diffusivities and thermal conductivities of silica and fireclay refractories, B., 947.

Green, B. M. See Desborough, A. P. H.

Green, E. W., devices for separating liquids of different specific gravities, (P.), B., 937*.

Green, E. W., and Ogden, H., apparatus for separating fuel and other oils from water, (P.), B., 82*.

Green, E. W., Ogden, H., and Unthank, G. R., separating oil from water contaminated with oil, (P.), B., 113.

Green, G. M., automatic siphonic gas circulator, A., 593.

Green, G. M. See also Jones, A. O.

Green, H., value of a direct measurement method for particle size determination, B., 935.

Green, J. B. See Petersen, M.

Green, T. E., and Hinselwood, C. N., catalytic decomposition of nitric oxide at the surface of platinum, A., 915.

Green, T. E. See also Hinselwood, C. N.

Greenawalt, W. E., metallurgical process [for treating copper ores], (P.), B., 330. 496.

apparatus for treating liquids with gases, (P.), B., 473, 567, 1000.

metallurgical apparatus [shaft furnace], (P.), B., 591.

Greenbaum, F., cement for floors and plastering on walls, B., 587.

Greenbaum, F. R. See Gelinie, A. J.

Greenberg, D. M., and Schmidt, C. L. A., formation and ionisation of the compounds of caseinogen with alkali. IV. Transport numbers of the compounds of caseinogen with the alkaline-earth elements, A., 212.

Green, A. R. See Wood, A. E.

Greene, H., 4- and 4'-methoxybenzoylbenzoins, A., 407.

Greene, M. C. See McClure, C. W.

Greenfield, G. J., caking of ammonium sulphate, B., 359.

Greenfield, R. C., and Allis-Chalmers Manufacturing Co., rod mill, (P.), B., 728.

Greenfield, R. E., and Elder, A. L., effect of temperature on rate of deoxygenation of diluted sewage, B., 422.

Greenfield, R. E. See also Buswell, A. M.

Greenhalgh, E. See British Celanese, Ltd.

Greenspan, A., purifying hydrocarbons, (P.), B., 41*.

Greensstreet, C. J., and Gasoline Corporation, controlling the supply of steam and oil to an oil-cracking still, (P.), B., 623.

Greenwald, H. P., and Wheeler, R. V., coal dust explosions; effect of release of pressure on their development, B., 178.

Greenwald, I., effect of administration of calcium salts and of sodium phosphate on calcium and phosphorus metabolism of thyroparathyroidectomised dogs, A., 425.

solubility of some picrates and determination of guanidines in urine, A., 1068.

Greenwald, I., and Gross, J., excretion of calcium, magnesium, and phosphorus (a) following thyroparathyroidectomy, (b) following injections of calcium chloride, sodium phosphate, or both, (c) following injection of parathyroid extract, A., 206.

Greenwell, A., application of the Chance sand flotation process to washing bituminous coal, B., 473.

Greenwood, C. V., grinding mills, etc., (P.), B., 424.

Greenwood, F. E., and Pine Waste Products, Inc., production of resin (from pulp mill black liquor), (P.), B., 10.

Greenwood, G., X-ray goniometer; crystal structure of glyoxaline compounds, A., 563.

Greenwood, G. See also Dixon, H. B.

Greenwood, W. W. See Norton Co.

Greenwood & Batley, Ltd., and Barker, J. H., machines for rolling explosives or other similar gelatinous substance, (P.), B., 613*.

Greer, W. N. See Parker, H. C.

Greeske, H. See Meisenheimer, J.

Groffe, R. See Legentil, L. D.

Greger, H., coking of coal, B., 305.

Gregersen, M. I. See Becking, L. B.

Gregor, W. D., Osborne, W. M., and Kemzura, A. J., treating [paper] pulp, (P.), B., 580.

bleaching process [for paper pulp], (P.), B., 913.

Gregory, J. W., treatment of ores for the recovery of titanium, tungsten, and tantalum, (P.), B., 590.

treatment of ores for recovery of titanium, (P.), B., 885.

Gregory, H., and Archer, C. T., experimental determination of the thermal conductivities of gases, A., 231.

variation of the thermal conductivity of gases with pressure, A., 349.

Gregory, J., experimental method for investigating thermal properties of cotton fabrics, B., 944*.

Greig, E. F., determination of fineness of coal dust, B., 905.

Greig, G. W. See Wyckoff, R. W. G.

Greig, J. W., formation of mullite from cyanite, andalusite, and sillimanite, B., 123*.

Greinacher, H., method for measuring ionising radiations [such as α -particles], A., 553.

Greinert, W., and Behre, J., determination of quality of raw rubber, B., 374.

variations of plasticity, nerve, and rate of vulcanisation of raw rubber, B., 890.

Greisheimer, E. M., irritability and blood-sugar, A., 1051.

Grelck, W. P. M., semi-solid stock food, (P.), B., 74, 419*.

Gremels, H., and Bodó, R. von, excretion of uric acid by the kidney, A., 1053.

Grendel, F. See Gorter, E.

Grénet, L., iron-nickel and iron-cobalt equilibrium diagrams, A., 245*; B., 132*.

limiting states in the crystal phase, A., 339.

iron-nickel equilibrium diagram, B., 443.

limiting states of [ferrous] alloys, A., 1199.

Gréngg, R., so-called soluble silicic acid in silica rocks and in silicified rocks and its detection, A., 1221.

Greppi, E., hydrogen-ion concentration of the faeces; participation of the intestine in the regulating mechanism of the acid-base equilibrium, A., 1269.

Greue, H. See Eekert, W., and Kränzlein, G.

Grevenskjøl, A. and Laqueur, E., glycogen content of the liver of rabbits during the action of insulin. II., A., 870.

Grewin, F., manufacture [drying] of paper, (P.), B., 269.

Gribkov, J. See Terentiev, A. P.

Grice, C. S. W., and Guillford, A. G., detection of firedamp by electrical means, B., 906.

Griebel, C., determination of essential oils in spices, B., 850.

Griebel, C. and Sonntag, F., microscopical determination of husk in cacao products, B., 605.

Grieng, F. See Müller, Robert.

Griessbach, R. See Badische Anilin- & Soda-Fabrik, and I. G. Farbenind. A.-G.

Griffin, B. L. See Friend, J. N.

Griffin, F. H., and Viscose Co., recovery of caustic hydroxides from waste solutions, (P.), B., 274*.

Griffin, F. W., and Vickers, Ltd., machine for pulverising or grinding coal and other materials, (P.), B., 696*.

Griffith, E. P. See Alsberg, C. L.

Griffith, J. O., measurement of radiation intensities by photographic methods, A., 378.

application of spectrophotography to measurement of high temperatures, B., 79.

Griffith, R. O., and McKeown, A., photochemical and thermal decomposition of ozone, A., 585*.

Griffith, W. H., benzoylated amino-acids in the animal organism. I. Behaviour of hippuric acid following oral administration, A., 429.

benzoylated amino-acids in the animal organism. III. Determination of hippuric acid; synthesis of hippuric acid in rabbits, A., 972.

Griffith, *W. H.*, and Cappel, *P. B.*, benzoylated amino-acids in the animal organism. II. Hydrolysis of hippuric acid in the alimentary canal of the rabbit, *A.*, 429.

Griffiths, *C. A.*, apparatus for distilling carbonaceous materials, (*P.*), *B.*, 261*.

Griffiths, *E.*, measurement of humidity in closed spaces, *B.*, 79.

Griffiths, *E.* See also Awbery, *J. H.*

Griffiths, *R. W.*, plasticity of unvulcanised rubber, *B.*, 374.

Griffiths, *W. T.* See Haughton, *J. L.*

Grigaut, *A.*, Debray, *M.*, and Furstner, *W. E.*, lipin content of blood in relation to cell resistance, *A.*, 317.

Grigl, *P.* See Manicke, *P.*

Griggs, (*Miss*) *M. A.*, and Johnstn, (*Miss*) *R.*, preparation and colloidal properties of pectin, *B.*, 643.

Grignard, *V.*, and Chambret, *F.*, ketonic scission of tertiary alcohols, *A.*, 268.

Grignard, *V.*, and Jenkins, *R. L.*, mixed organo-aluminium compounds; aluminium ethyl and diethyl iodide, *A.*, 55.

Grignard, *V.*, and Muret, *P.*, pyrosulphuryl chloride, I. and II., *A.*, 1113, 1218.

Grignard, *V.*, and Perrichon, *H.*, α -halogenated hydrocarbons of the acetylene series, *A.*, 381.

Grignard, *V.*, and Savard, *J.*, constitution of pulegone, tertiary alkylpulegols, and pulegones, *A.*, 72.

existence of isopulegone in nature; isolation of α (iso)- and β (normal)-pulegone and their enolic isomerides, *A.*, 408.

Grigorieva, *V. F.* See Pigulevski, *G. V.*

Grigorjev, *P.*, gasometric determination of primary aromatic amines, *A.*, 1043.

Grigsby, *H. D.* See Hoffman, *C.*

Grins, *G.*, diet and reproduction, *A.*, 546.

Grillet, *E.* See Kehrmann, *P.*

Grillet, *N. B.*, and Société Chimique des Usines du Rhône, manufacture of cellulose esters or ethers in a solvent, (*P.*), *B.*, 152.

Grillet, *N. B.*, and Société pour la Fabrication de la Soie "Rhodiaset," apparatus for the manufacture of artificial threads, (*P.*), *B.*, 234*.

Grimble, *F.*, Caird, *M. N.*, and Coombs, *E.*, centrifugal separators for liquids, (*P.*), *B.*, 968.

Grimm, *F. V.* See Rogers, *T. H.*

Grimm, *H. G.*, ionic properties and chemical facts. X. Curves of the ionic magnitudes, atomic volumes, and atomic magnitudes and the empirical facts, *A.*, 1078.

Grimm, *H. G.*, and Sommerfeld, *A.*, relation between the closing of electronic groups in the atom and the chemical valency, *A.*, 560.

Grimm, *H. G.*, and Wolff, *H.*, evaluation of the size of ions, *A.*, 664.

Grimmer, *W.*, and Wagenführ, *B.*, chemistry of the ripening of cheese, II., *B.*, 26.

Grimo-Sanson, *R.*, manufacture of rubber products containing cork, (*P.*), *B.*, 205.

Grimley, *G. C.* See Tyndall, *A. M.*

Grine, *H. A.*, and Grasselli Chemical Co., zinc condenser, (*P.*), *B.*, 134.

Grinten, *K. van der*, adsorption and cataphoresis, *A.*, 467.

Grisar, *C. M.* See Schlimmer, *E.*

Grisard, *G.*, preparation of a catalyst for recovering light hydrocarbons from heavy mineral oils and shale oils, (*P.*), *B.*, 231.

Griscom-Russell Co., and Brown, *S.*, evaporators, (*P.*), *B.*, 855.

Griscom-Russell Co., and Jones, *R. C.*, apparatus for treating liquids; [removing gases from boiler-feed water], (*P.*), *B.*, 614*.

Griscom-Russell Co., and Price, *J.*, heat exchanges, (*P.*), *B.*, 616*.

Griscom-Russell Co., and Sebald, *L. E.*, vertical film type evaporators, (*P.*), *B.*, 647.

Griscom-Russell Co. See also Price, *J.*

Griswold, *R. G.*, and Doherty Research Co., gas calorimeter, (*P.*), *B.*, 351.

Groák, *B.*, micro-determination of total iodine and of iodine in organic acids, *A.*, 1163.

Grobstein, *K.* See Weiss, *R.*

Grobler, *K.* See Meyer, *Julius.*

Groen, *J.*, synthetic action of pancreatic and intestinal lipases, *A.*, 977.

Gronwall, *E. A. A.*, manufacture of metals and alloys in the electric furnace, (*P.*), *B.*, 548.

Groesbeck, *E. C.*, metallographic etching reagents. III. For alloy steels, *B.*, 361.

Grogan, *J. D.*, mechanical properties of silicon-aluminium alloys, *B.*, 831.

Grob, *J.*, diffusion velocity of egg-albumin in different aqueous media, *A.*, 903.

Groll, *H. M.* See Smith, *A. H.*

Grollman, *A.*, relation of the filterability of dyes to their excretion and behaviour in the animal body, *A.*, 317.

ultrafiltration through collodion membranes, *A.*, 1052.

Gronover, *A.*, and Wohlnich, *E.*, water content of tinned sausages, *B.*, 606.

application of the Feder ratio to tinned sausages, *B.*, 393.

Gronroos, *H.*, manufacture of burnt building materials, etc., from clay, (*P.*), *B.*, 632.

Grosche, *A.*, concentration of dilute sulphuric acid, (*P.*), *B.*, 742.

Gross, *J.* See Greenwood, *I.*

Gross, *K.* See Weinland, *R.*

Gross, *O.* See Kalb, *L.*

Gross, *P.*, molten salts as solvents for strong electrolytes, *A.*, 359.

Gross, *P.*, and Halpern, *O.*, mixed electrodes of the second type, *A.*, 123.

Gross, *P.* See also Klemenc, *A.*

Gross, *R.* See Siemens & Halske A.-G.

Gross, *Sherwood, & Head, Ltd.*, Phillips, *R. A.*, and Thurlow, *H. A. R.*, nitrocellulose varnishes, (*P.*), *B.*, 760.

Grosse, *A. von*, periodic system and the alkyl compounds of the elements, *A.*, 555.

Grosse, *A. von*. See also Krause, *E.*

Grossfeld, *J.*, determination of milk fat in fatty mixtures, *B.*, 447, 678.

determination of shell in coco and chocolate, *B.*, 688.

Grossfeld, *J.* See also Baumann, *C.*, and Kuhlmann, *J.*

Groskopf, *W.*, conversion of lignin into humic acid and humin in the formation of humus and lignite from conifer remains, *B.*, 939.

Grossman, *M. A.*, and Bain, *E. C.*, nature of low-tungsten tool steels, *B.*, 981.

Grossmann, *V.* See John, *H.*

Grosvenor Scientific Products, Ltd., and Turner, *B.*, refractory material, (*P.*), *B.*, 642.

Grote, *A.*, utilisation of domestic and industrial refuse [for making glass], (*P.*), *B.*, 158.

producing moulded articles from refuse or its constituents, (*P.*), *B.*, 948.

Grote, *I. W.* See Fry, *H. S.*

Grote, *W.* See Hofmann, *F.*

Groth, *M.* See Sommer, *F.*

Grotian, *W.* See Giesecke, *H.*

Grover, *C. E.* See Chibnall, *A. C.*

Groves, *W. H.* See Gorton, *A. F.*

Grubb, *A. C.*, Dewar flask in physical chemistry laboratory exercises, *A.*, 265.

transfer of excited energy from ozone to hydrogen and nitrogen, *A.*, 588, 1011.

Grube, *G.*, and Fleischheln, *W. von*, surface improvement of metals by diffusion. I. Diffusion of chromium into iron and the limits of resistance of mixed crystals of chromium and iron, *B.*, 749.

Grube, *G.*, Heidinger, *R.*, and Schlecht, *L.*, electrochemical behaviour of chromium, *A.*, 362.

Grube, *G.*, and Motz, *G.*, behaviour of cyanamide in acid and alkaline solution, *A.*, 131.

Grube, *G.*, and Schlecht, *L.*, electrochemistry of chromium. II. Equilibrium potentials Cr^{3+}/Cr^{2+} and Cr^{3+}/Cr^{4+} , *A.*, 687.

Grube, *G.*, and Schmid, *G.*, law of neutral salt action in concentrated solutions. I. Influence of neutral salts on the acid hydrolysis of cyanamide, *A.*, 471.

Gruber, *W.* See Wacker, *A.*, Ges. für Elektrochem. Ind.

Gruber-Rehberg, *P.* See Kremann, *R.*

Grün, *A.*, synthesis of waxes, *B.*, 337.

Grün, *A.*, and Czerny, *W.*, octadecenoic acids, *A.*, 269.

Grün, *A.*, and Limpach, *R.*, course of substitution reactions with halogenohydins. I. *A.*, 596.

determination of the isopropylidenedioxy-group and reaction of polyhydric alcohols with acetone. I. Derivatives of glycerol, *A.*, 632.

salts of phosphatide bases, *A.*, 826.

synthesis of lecithins. I. *A.*, 827.

Grün, *I.*, Ulbrich, *E.*, and Krezl, *F.*, synthesis of waxes, *A.*, 396.

Grün, *R.*, xylolite [from sawdust and magnesia cement], *B.*, 99.

grinding blast-furnace cement or slag cement, (*P.*), *B.*, 193.

blast-furnace slag as a building material, *B.*, 276.

cement from blast-furnace slag, (*P.*), *B.*, 276.

three-component system lime-silica-alumina and hydraulic binding materials, *B.*, 323.

thermal investigations on blast-furnace slags. I. Latent energy of blast-furnace slags. II. Latent energy of blast-furnace slags and the single components of the three-component system silica-lime-alumina, *B.*, 324.

Grün, *R.*, and Muth, *W.*, utilisation of freshly made, hot cement, *B.*, 324.

Grün, *S.* See Kohn, *M.*

Grünbaum, *A.*, See Snapper, *J.*

Grüneisen, *E.*, and Goens, *E.*, thermo-electric properties of zinc and calcium, *A.*, 784.

Grünwald, *H.*, annealing and similar furnaces, (*P.*), *B.*, 415*.

Grüenthal, *E.* See Riesenfeld, *E. H.*

Grüss, *J.*, hydrogenase, *V.*, *A.*, 865.

Grüss, *J.* See also Nagel, *W.*

Grütterlin, *B. W.* See Ringer, *W. E.*

Grützmacher, *H. F. jun.*, and Glencoe Lime & Cement Co., kiln, (*P.*), *B.*, 519.

Grubitz, *O. M.* See Björk, *A. M.*

Grumbach, *A.*, origin of the *E.M.F.* of a photo-electric cell containing a fluorescent electrolyte, *A.*, 913.

Grundberg, *G. F. von*. See Kuhn, *R.*

Gruner, *H.* See Cederberg, *I. W.*

Grunert, *W.*, internal friction and density of mixed aqueous solutions of salts and acids, *A.*, 350.

Grunwald, *B. B.*, process for making (A) heavy basic carbonate of magnesium, and (B) light basic carbonate of magnesium, (*P.*), *B.*, 486.

Gruschwitz, *C. A.*, Akt. Ges., machines for mercerising fabrics, (*P.*), *B.*, 403.

Gruse, *W. A.* See Faragher, *W. F.*, Livingstone, *C. J.*, and Stevens, *D. R.*

Grzenkowksi, *M.* See Henglein, *F. A.*

Guastalla, *G.* See Giua, *M.*

Gubarev, *E.* See Kultjugin, *A.*

Gubelmann, *I.*, Goodrich, *R. J.*, and Newport Co., purification and isolation of authraquinone- β -sulphonic acid, (*P.*), *B.*, 578.

Gubelmann, *I.*, and Newport Co., anthraceno dye [from dihalogenopyranthrones (*P.*), *B.*, 910].

Gubelmann, *I.*, Tinker, *J. M.*, and Newport Co., preparing 1:8-aminonaphthol-sulphonic acids, (*P.*), *B.*, 628.

Gubler, *H.* See Rupc, *H.*

Gubler, *H.* See Society of Chemical Industry in Basle.

Guddon, *B.*, and Pohl, *R.*, photo-electric conductivity in selenium, *A.*, 217.

Gudris, *N.* See Lukivsky, *P.*

Gühring, *E.* See Wilkes-Dörfert, *E.*

Gündel, *H. von*. See Riesenfeld, *E. H.*

Güntelberg, *E.*, ionic interaction, *A.*, 1207.

Günther, *E.*, Neubauer's "see lling" method [for determining manurial requirements of soils], *B.*, 250.

Günther, *F.* See Badische Anilin- & Soda-Fabrik.

Günther, *O.*, purifying boiler-feed water, (*P.*), *B.*, 614.

Günther, *P.*, and Straanske, *I. N.*, X-ray analysis, *A.*, 111.

Günther, *P.*, and Wilcke, *G.*, X-ray analyses. II. Photometric determination of X-ray spectral lines by the silver grain method, *A.*, 663, 997.

Günther, *P.* See also Bodenstein, *M.*

Günther-Schulze, *A.*, normal cathode fall in krypton and xenon, *A.*, 3.

electroresists, *A.*, 4.

cathodic sputtering. I. Electrochemical sputtering, *A.*, 693.

cathodic sputtering. II. *A.*, 1013.

Guerbet, *M.*, asymmetric dialkylaromatic acids; methylethylaromatic acid, *A.*, 597.

Guérin, *R.*, analysis of commercial magnesium, *B.*, 326.

Guernsey, *E. W.*, and Sherman, *M. S.*, thermal dissociation of sodium carbide, *A.*, 246.

thermal dissociation of sodium cyanide, *A.*, 474.

Guernsey, *E. W.*, Yea, *J. F.*, Braham, *J. M.*, and Sherman, *M. S.*, factors affecting the fixation of nitrogen as sodium cyanide, *B.*, 358.

Guerrant, *N. B.*, micro-colorimetric method for the determination of phospholipins in seeds, *A.*, 1184.

vacuum extractor for biochemical use, *A.*, 1223.

Guerrant, *R. H.*, and Industrial Appliance Co., flour-treating apparatus, (*P.*), *B.*, 607.

Guerry, *C.*, preparation of organic thiocarbonates, (*P.*), *B.*, 141.

Guerlet, *A. B.*, direct production of brass from mixed ores, *B.*, 829.

Gürtler, *J.* See Chem. Fabr. Griesheim-Elektron.

Gürtler, *W.*, ennoblement of metallic surfaces, (*P.*), *B.*, 41.

constitution of ternary systems [alloys], *B.*, 588.

Gnettler, *R. O.* See Wilson, *J. A.*

Guggenheim, E. A., determination of the velocity constant of a unimolecular reaction, A., 1009.

Gugeheimer, S. See Skraup, S.

Guglielmi, L., and Novelli, A., preparation of cyclic thiocarbamides, A., 720.

Guha, B. C. See Ray, P. C.

Guha, P. C., and Chakradar, M. N., dithiopyrocatechol, A., 398.

Guha, P. C., and De, M. K., α -aminophenylhydrazine and some heterocyclic compounds derived from it. II. Synthesis of azoles, azines, heptazines, and octazines, A., 743.

Guha, P. C., and Dey, S. C., hetero-ring formations with thiocarbohydrazide. II. Condensations with diketones and aldehydes, A., 417.

Guichard, J., system water-aluminium oxide, A., 475.

weighing by hydrostatic compensation, A., 1021.

Guignard, G. P., utilisation of residues by vacuum distillation in presence of steam, (P.), B., 304.

recovery of ammonia from vinasses, (P.), B., 562.

Guil, J., the monochromatic-plus-white method of colorimetry, B., 303.

new method of colorimetry, B., 303.

trichromatic colorimeter suitable for standardisation work, B., 303.

Guillaumin, C. O., method of representing the variations in the concentration of hydrogen ions in organic media, and especially blood, A., 854.

Guillaumin, C. O. See also Dalsace, J.

Guilleaume Carlswerk Aktien-Gesellschaft, spectroscopic testing of the metal bath in the refining of iron in the electric furnace, (P.), B., 329.

Guillemin, V., jun., molecular structure of methane, A., 1083.

Guillemot, L. H. F., manufacture of coal briquettes, (P.), B., 182.

Guillet, H. F., recovery of tin from tin-plate scrap, (P.), B., 885.

Guillet, L., properties of heat-treated nickel-chrome steels, B., 194.

transformations of certain alloys of aluminium, and influence of deformation, E., 244*.

nitridation of ordinary and special steels, B., 410.

cementation of copper, nickel, and their alloys by tin, B., 588.

hardening of lead-antimony, lead-tin, and lead-antimony-tin alloys, B., 588.

cementation of copper and its alloys by aluminium, B., 633.

cementation of steel by silicon, B., 670.

influence of shrinkage on the mechanical properties of alloys of copper and of aluminium, B., 950.

Guillet, L., and Cournot, J., influence of thermal treatment on silver alloys, B., 325.

Guillet, L., and Gallibour, J., quenching the light aluminium-copper alloys containing more than 5% of copper, B., 92.

heat treatment of aluminium-copper alloys, B., 443.

Guillet, L., and Portevin, A., influence of chemical composition of alloys on the power of obtaining moulded pieces (or flow-ability), B., 983.

Guillot, M., complex salts obtained by the action of α -picoline on alkali hexachloroiodides, A., 737.

action of α -picoline on alkali hexachloroiodides, A., 953.

Guinot, H., industrial manufacture of absolute alcohol, B., 459.

Guittoneau, G., bacterial oxidation of sulphur, A., 545.

Guittoneau, G., Keiling, J., and Barret, A., use of commercial rennet in the manufacture of cheese from whey, B., 718.

Gulbins, W. See Meyer, Julius.

Gulbransen, R. See Browning, C. H.

Gulevitsch, V. See Anzegier, A.

Gulf Refining Co., removing aluminium chloride residues from vessels used for the catalytic treatment of petroleum hydrocarbons, (P.), B., 431*.

Gulf Refining Co. See also Faragher, W. F., McAfee, A. McD., Pritchard, G. L., and Stevens, D. R.

Gulland, J. M., and Robinson, H., constitution of codeine and thebaine, A., 83.

derivatives of honicotephene, II., A., 1035.

Gulland, J. M. See also Graesser-Thomas, F. R.

Gulliford, A. G. See Grice, C. S. W.

Gummert, H. See Jungbluth, H.

Gund, F. See Dafert, O.

Gunther, L. See Mayerson, H. S.

Guntz, A. A., phosphorescent sulphides of zinc. I., II., and III., A., 558, 885, 993.

phosphorescence of metallic sulphides, A., 885.

Gupta, S. See Ghosh, J. C.

Gupta, S. N., indigo dyestuff, (P.), B., 736.

Gurchot, C., reversible permeability of membranes and relation to cell metabolism, A., 240.

Gurney, R. W., number of particles in the β -ray spectra of radium-B and radium-C, A., 5.

number of particles in β -ray spectra. II. Thorium-B and thorium-C + D, A., 990.

Gurvitsch, L., new process for regeneration of spent decolorising powder, B., 348.

regeneration of decolorising materials, (P.), 650.

Gusmer, A., producing a jelly base, (P.), B., 564.

Gustafson, E. G. T. See Flodin, H. G.

Gustavson, K. H., internal complex salt formation as mechanism of chrome tanning, B., 230.

colloid chemistry in tanning, B., 291.

action of chromium salts on permutter; indirect proof of the chemical nature of one-bath chrome tanning, B., 503.

possible explanation of the antagonistic action of neutral salts upon hide substance, B., 503.

determination of the isoelectric point of hide powder by means of complex chromium salts, B., 798.

behaviour of neutral salt-treated hide powder towards tanning agents, B., 839.

Gustavson, K. H., and Widén, P. J., concentration factor in the fixation of chromium compounds by hide substance from chromium chloride solutions, B., 556.

Gustin, D. S., and Westinghouse Lamp Co., cold exhaustion of incandescence electric lamps, (P.), B., 651.

Gustus, E. L. See Jacobs, W. A.

Guthier, A., polychrome mercury hydrosols, A., 241.

colloid chemistry of bismuth, A., 350.

thermal synthesis of colloids. I. Colloidal sulphur, A., 574.

Guthier, A. [with Köhler, H.], thermal synthesis of colloids. II. Colloidal selenium, A., 1003.

Guthier, A., Hüttig, G. F., and Döbling, H., system stannic oxide-water, A., 798.

Guthier, A., Hüttig, G. F., and Linck, G., pandermite, A., 379.

Guthier, A., Kautter, T., and Gentner, R., colloidal bismuth, A., 121.

Guthier, A., and Leutheusser, E., colloidal rhodium, A., 121.

Guthier, A., and Ottenstein, B., colloidal tellurium, A., 121.

rapid dialyser for clinical purposes, A., 647.

Gutenkunz, G. O., and Eastman Kodak Co., carbocyanine dyes [infra-red sensitizers], (P.), B., 265.

Guth, E., anomalous scattering of α -particles, A., 880.

Guthrie, C. C., blood-gas analyser, A., 1184.

Gutmann, A. B. See Abderhalden, E.

Guttin, H., cooling of liquids to form powdered or granular solids, particularly soap powders, (P.), B., 449*.

Guttmann, A., fineness of particles of cement, especially iron Portland cement, B., 543.

testing the stability of blast-furnace slag by means of ultra-violet light and the cause of the disintegration of the slag, B., 983.

Guyot, O. See Vanino, L.

Gwyer, A. G. C., and Phillips, H. W. L., constitution and structure of commercial aluminium-silicon alloys, B., 830.

Gwyer, A. G. C., Phillips, H. W. L., and British Aluminium Co., Ltd., method of treating aluminium-silicon alloys, (P.), B., 496*.

Gwyer, A. G. C. See also British Aluminium Co.

Gyemant, A., theory of the breakdown of liquid dielectrics, A., 336*.

distribution of size of particles in disperse systems, A., 561.

Gyngell, E. S., alkaline hydrolysis of esters in aqueous-alcoholic solution. I. Interaction of phenoxides and aliphatic esters in alcoholic solution, A., 1134.

György, P., autolytic decomposition of organic phosphorus compounds in the tissues, A., 93.

György, P., and Röthler, H., conditions for the autolytic formation of ammonia in the tissues. II. Influence of amino-acids and other nitrogenous substances on ammonia formation, A., 864.

Gyotoku, K. See Rona, P.

Gysin, E., decahydrophthalene and its substitution products, A., 389.

Gyulai, Z., photo-electric and optical measurements on blue and yellow rock-salt crystals, A., 225.

additive colouring of alkali halide crystals, A., 885.

Gyurkovitch, T. von. See Barath, E.

H.

Hag, J., applications of the equation of transfer in the kinetic theory of gases, A., 1206.

use of a blast enriched in oxygen in the Thomas process, B., 56.

Haagen & Rinai, and Rinai, W., mixing and kneading machines, (P.), B., 3*.

Haagen, E., and Heraeus, W. C., G.m.b.H., alloy, (P.), B., 134*.

osmium alloy, (P.), B., 331*.

Haagel, F., and Gilmore, R. E., coking experiments on coals from the Maritime Provinces, B., 697.

Haar, A. W. van der, saponins and related substances. XV. Escigenin, A., 522.

Haardt, R. See Levi, G. R.

Haas, H., apparatus for drying textile or fibrous material, (P.), B., 235*.

drying apparatus for textiles, (P.), B., 1010*.

Haas, J., and Unruh, E. R., electroplating on non-rusting iron, B., 242.

Haas, K., saponaceous cleansing compositions, (P.), B., 136.

Haas, L. See Soc. of Chem. Industry in Basle.

Haas, P., and Hill, T. G., *Mercurialis*. III. Physiological significance of the chromogen, A., 99.

oxidation and reducing properties of hermidin, the chromogen of *Mercurialis*, A., 1066.

Haas, R., Maurer, H., and Küster, W., bile pigments. XVII. Copper bilirubin, A., 87.

Haas, R. See also Abderhalden, E.

Haaso, L. W., colorimetric determination of uritates, B., 582.

corrosion of aluminium by water. I., B., 671.

Haase, W. See Riesenfeld, E. H., and Wrangell, J. von.

Haber, F., Jaenicke, J., and Matthias, F., alleged preparation of "artificial" gold from mercury, A., 699, 922.

Heraber, E. See Kaul, L.

Haberland, U. See Vorländer, D.

Hac, R., and Hodina, B., mucic and allomucic acids, A., 49.

Hack, E. B., and Burt, E. J., production of finely-crushed diabases, granites, and allied stones, (P.), B., 55.

Hackel, F., non-rusting connexions for wooden vessels and apparatus to contain acid liquids, (P.), B., 177.

Hackelöer-Köbbinghoff, impurities [discolorations] in fired porcelain, B., 541.

Hackl, J. See Jangmich, E.

Hackl, O., determination of ferrous oxide in fusible silicates, A., 40.

Hackspill, L., and D'Huart, G., accurate determinations based on measurement of gaseous volume, A., 374.

Hackspill, L., and Grandadam, R., study of sodium and potassium salts, A., 569.

Hackspill, L., and Pinck, H., displacement of cesium and of rubidium by iron, A., 1015.

Hackspill, L., Rollet, A. P., and Nicloux, M., argon in blood, A., 536.

Hackspill, L., and Sigot, A., continuous and automatic apparatus for distilling mercury in a vacuum, A., 1118.

Haco-Ges. A.-G. Bern. See Bally, O.

Haddon, W., accumulator plates, (P.), B., 1019*.

Haden, R. L., chloride content of blood in pernicious anæmia, A., 859.

Hader, H., preparation of mosaic gold [tin sulphide], B., 201.

Hadfield, G. H., classification of furnace ash, gas retort ash, household refuse, etc., (P.), B., 121*.

utilising coke contaminated with vegetable matter derived from the treatment of house refuse, (P.), B., 428.

Hadfield, (Sir) R., physical chemistry in steel making, B., 367*.

Hadjiev, M. D., apparatus for automatically washing precipitates, A., 815.

Hadnagy, Z., and De Christian, V. G., decoration of electric incandescence lamps and bulbs, (P.), B., 922.

Haebler, T. See Ney, A. II.

Hägg, G., silicates. III. Hydrolysis of sodium silicate, A., 924.

Hägglund, E., chemistry of the sulphite-cellulose digestion process, B., 312, 911.

Hägglund, E., and Augustson, A. M., relation between alcoholic fermentation and hydrogen-ion concentration. II. and IV., A., 324, 543.

Hägglund, E., and Ringbom, A., sulphite addition to unsaturated compounds, A., 363.

Hägglund, E., and Rosenqvist, T., relation between alcoholic fermentation and hydrogen-ion concentration, V., A., 1177.

Hägglund, E., Söderblom, A., and Troberg, E., relation between alcoholic fermentation and hydrogen-ion concentration, III., A., 543.

Hägglund, E. See also Goldschmidt, T., A.-G.

Haehn, H., catalysts from plasmophytic materials, A., 1216.

Haehn, H., and Berentzen, H., amylase type: neutral salts—amino-acids—peptone, B., 603.

Hähne, H., Neubauer's method for determination of available phosphoric acid and potassium [in soils], B., 1023.

Häkansson, A. See Alsterberg, G.

Haempel, O., effect of dyes used in paper-making on the animal life of water, B., 264.

Händler, W. See Rosenheim, A.

Haenzi, P., boron in aluminium and its alloys, B., 58, 672.

Haenigk, J. E., autothermic distillation of solid fuel, (P.), B., 182.

Hänsel, G., electrolysis of electrolytes containing cuprous chloride, A., 483.

Haensel, W. See Braun, J. von.

Härden, J., refractory articles [for electric furnaces] from tungsten powder, B., 922.

Härden, J., and Tillquist, H. T., applying non-corrosive coatings to metals, (P.), B., 1019.

Häring, F., and Frey Engineering Co., cleaning blast-furnace gases, (P.), B., 655*.

Häusler, H., absorption of amino-acids by erythrocytes and its effect on the distribution of the residual nitrogen, A., 1165.

Häusler, J., production of high-grade flour from maize, (P.), B., 297.

Häfner, F., and Simon, R., colorimetric determination of calcium-ion concentration; ionic equilibrium in the organism, A., 100.

Häfner, L. C., electrolytic purification of graphite, (P.), B., 986.

Häfner, E. A., specific rotatory dispersion of serum proteins, A., 226.

nomenclature of serum proteins and expression of serum viscosity, A., 421.

Häfner, E. A. See also Arad, O.

Hagen, G., Compton effect, A., 103.

Hagenest, H. See Hofmann, K. A.

Hager, F. D., and Marvel, C. S., valency of nitrogen in quaternary ammonium compounds, A., 1232.

Hagenmacher, H. E., producing catalytic reactions, (P.), B., 33.

Hagimoto, Y. See Kinoshita, S.

Hagiwara, S., and Aoyama, N., enzymes of the "Anka" and of *Monascus purpureus*, A., 1278.

Hagiwara, T., transformation of water of hydration into water of adsorption by mechanical disintegration of crystal hydrates, A., 119.

Hagiwara, T. See also Weinman, P. P. von.

Haglund, T. R., treatment of oxidic raw materials, (P.), B., 164*.

Haglund process for the electrothermic production of pure aluminium oxide, B., 191.

electrolytic process for producing aluminium and its alloys, (P.), B., 754.

Hagues, G., hydrogen ions in brewing processes, B., 210.

Hahl, H., and Winthrop Chemical Co., basic phenol alkyl ethers, (P.), B., 721.

Hahl, H. See also Farbenfabr. vorm. F. Bayer & Co., and L. G. Farbenind. A.-G.

Hahn, A., Fasold, H., and Schäfer, L., synthetic glucosides of pyrimidine derivatives. I. Synthesis of methylsucrositosine-d-glucoside, A., 275.

Hahn, A., and Schäfer, L., behaviour of pyrimidine derivatives in organisms. II. Action of *Bacillus coli* on uracil and cytosine, A., 203, 1062.

Hahn, A. See also Fromm, E.

Hahn, C. See Siemens-Schuckertwerke G.m.b.H.

Hahn, D. A., and Gilman, E., synthesis of the polypeptide hydantoin: tyrosyl-alaninehydantoin. II., A., 180.

isomerisation in the hydantoin series induced by the action of hydrogen chloride, A., 181.

Hahn, F. L., detection and determination of small quantities of perchlorate in Chill saltpetre and in chlorates, B., 494.

Hahn, F. L., and Brünigasser, K., solubility of alkaline-earth carbonates in aqueous hydroxylamine solutions, A., 672.

supersaturation in turbidity titrations and a procedure for determining solubilities, A., 672.

Hahn, F. L., Meier, H. A., and Siegert, H., disulphito- and diselenito-complexes of bivalent central atoms with four co-ordination positions, and the preparation of sodium trisulphito-cobaltate, A., 372.

Hahn, F. L., and Schleipen, K., rate of decomposition and reducing power of aluminium amalgam, A., 695.

Hahn, F. L., and Wolf, Hans, volumetric determination of iodine, A., 1220.

Hahn, F. V. von, gel of protein type (found) in the kieselguhr stratum of the Lüneburg Heide, A., 23.

colloid chemistry of urine; a clinical dispersoid analysis, A., 352.

surface activity and the action of vitamins. I. The vitaminoid state. II. Coriuite, A., 1022.

technical dispersoid analysis, B., 143.

Hahn, G., and Brandenborg, W., yohimba alkaloids. I. Yohimbene, a new yohimba alkaloid, A., 1263.

Hahn, O. [with Erbacher, O., and Feichtinger, N.], regularities in the precipitation and adsorption of small quantities of substances and its relationship to the radioactive precipitation rule, A., 1092.

Hahn, O., and Erbacher, O., homogeneous disintegration and half-period of mesothorium-2, A., 990.

Hahn, O., and Heidenhain, J., highly emanating radium preparations, A., 332.

Hahn, O., and Meitner, (Fr.), L., β -ray spectra of radioactinium and its disintegration products, A., 105.

Hahne, A. See Blanck, A.

Haider, O. See Rollett, A.

Hailstone, H. J., large crystals in sulphate of ammonia manufacture, B., 663.

Hailwood, A. J. See Lefebvre, V.

Hajdu, S., tartaryhaemmin, A., 191.

Hakozaik, K., formula for the electrolytic swelling value of gold sol and iron hydroxide sol, A., 1005.

Halban, H. von, absorption of light by solutions of electrolytes, A., 585*.

Halban, H. von, and Eisenbrand, J., validity of Beer's law in dilute solutions of electrolytes, A., 992.

Halban, H. von, and Zimpelmann, E., dissociation constants of organic molecular compounds, A., 25.

Halbergerhütte, G.m.b.H., iron blast furnace process, (P.), B., 162.

Halberkann, J., and Kähler, H., isolation of d-galactose from urine following the galactose test for liver function, A., 859.

Halbig, P. See Fischer, Hans.

Haldane, W. G. See Fleck, H.

Hale, G. C., nitration of hexamethylenetetramine, A., 53.

Hale, W. J., and Dow Chemical Co., manufacture of phenols [from benzene hydrocarbons], (P.), B., 910.

Halávý, J. See Challenger, F.

Haley, D. E., biological measurement of the availability of potassium in soils, B., 102.

Hall, A. J., and Aische, M. I., comparison of the affinity of cotton, wool, and particularly cellulose acetate silk for azo-compounds [dyes] containing sulphon, carboxyl, arsinc, and stibinic acid groups, B., 270.

Hall, A. J. See also Silver Springs Bleaching and Dyeing Co., Ltd.

Hall, C. A., making oxidised leaden powder [litharge], (P.), B., 584.

Hall, C. E. V., ball and ring and roller and ring mills for grinding and crushing, (P.), B., 345.

Hall, E. H., measurement of the four magnetic transverse effects, A., 114.

dual-theory of metallic conduction, A., 665, 938.

temperature relations of photoelectric emission and thermionic emission of electrons, A., 938.

Hall, E. J., and Metals Disintegrating Co., disintegrating metals in ball mills, etc., (P.), B., 245.

Hall, F. G., Gray, L. E., and Lepkovsky, S., influence of asphyxiation on blood of marine fishes, A., 634.

Hall, F. P. See Gillespie, L. J.

Hall, F. W., and Texas Co., revivifying fuller's earth [used for refining mineral oils], (P.), B., 120.

treating hydrocarbon [lubricating] oils, (P.), B., 353.

Hall, G. See Kohler, S.

Hall, L., metal melting furnaces, (P.), B., 134*, 164*.

Hall, L. P. See Richards, T. W.

Hall, R. E., fundamentals in the conditioning of boiler water, B., 301.

Hall, R. E., Robb, J. A., and Coleman, C. E., solubility of calcium sulphate as boiler-water temperatures, B., 391.

Hall, S. H., and De Laval Separator Co., non-aerating apparatus for centrifugally purifying liquids, (P.), B., 33.

Hall, S. H., Hapgood, G. H., and De Laval Separator Co., separating wax from mineral oil distillates, (P.), B., 353.

Hall, S. H. See also Aktiebolaget Separator.

Hall, T. D., relative merits of mono-, di-, and tri-calcium phosphates as soil fertilisers, B., 892.

solubility of the copper in basic copper carbonate [used for treating wheat], B., 993.

Hall, V. C. See Jones, L. A.

Halla, F., non-poisonous electro-plating baths, (P.), B., 197.

Hallander, E., determination of free hydrochloric acid in gastric contents, A., 1068.

Halle, B. See Bogandörfer, L.

Hallen, E., quantised motion of a diatomic molecule in the Kramers model, A., 333.

Haller, H. J. See Levene, P. A.

Haller, J. See Farbenfabr. vorm. F. Bayer & Co.

Haller, R., dyes not fast to ironing, B., 402.

determining the degree of mercerisation of cotton fabric, B., 483.

influence of additions to the vat in dyeing with indigo, B., 819.

Haller, R., and Chemische Fabrik Pyros, manufacture of soluble-starch products, (P.), B., 103*.

Haller, R., and Holmann, A., comparison of the hydrolytic [liquefying] action of various substances on starch, B., 636.

Haller, R., and Ruperti, A., physical changes of dyes within dyed fibres, B., 316.

Halliday, N. See Kohlman, E. F.

Hallimond, A. F., chemical classification of the mica group. II. Basic micas, A., 815.

Halloran, R. A., Davis, W. N., Davidson, G. A., and Standard Oil Co., treatment of waste products [acid tar] from acid treatment of petroleum oil, (P.), B., 526.

Halloran, R. A., and Standard Oil Co., method of dehydrating oil emulsions, (P.), B., 864.

Hallstein, A. See Chem. Fabr. auf Aktien vorm. E. Schering.

Hain, E. T., digestibility trials with poultry. I. Digestibility of English wheats and of fibre in Sussex ground oats, B., 896.

Halowax Corporation. See Brown, S.

Halpern, G. See Glaser, E.

Halpern, O. See Gross, P.

Halpin, J. G. See Hart, E. B.

Halsey, J. T., Reynolds, C., and Prout, W. A., narcotic action of propylene, A., 320.

Halstead, T., and Smith, D. P., constitution of alloys of aluminium and magnesium from 32 to 48% magnesium, A., 565.

Halvorsen, B. F., and Norsk Hydroelektrisk Kvaestofaktieselskab, production of ammonium from gases containing hydrogen cyanide, (P.), B., 440*.

Hamacher, H. See Benrath, A.

Hamano, S., photoactivation of vitamin-A, cholesterol, fats, and other substances by ultra-violet light, A., 546, 1065*.

Hamburg, M., preparation of fruit wines resembling grape wines in aroma and flavour, (P.), B., 509.

Hamburger, L., Prins, E. C., and Naarni. Vennoots. Stikstoffbindingsind "Nederland," furnace for [high-temperature] chemical reactions, (P.), B., 857.

Hamburger, R., and Kaez, S., bleaching organic materials, (P.), B., 437*.

Hamburger & Co. See Liebers, H., and Mellemeuropæisk Patent-Financierings-Selskab A/S.

Hamer, R., photo-electric thresholds and the quantum theory, A., 1073.

relation between absorption coefficients, refractive indices, and photo-electric thresholds, A., 1183.

reflecting powers of elements in the ultra-violet and the photo-electric thresholds, A., 1188.

"raies ultimes" and photo-electric thresholds, A., 1188.

Hamel, R., transformation of ergotinine into ergotoxine in lactic acid solution, A., 1173.

Hamid, M. A., heterogeneous equilibria between the sulphates and nitrates of sodium and potassium and their aqueous solutions. I. Ternary systems, A., 245.

Hamid, M. A., heterogeneous equilibria between the sulphates and nitrates of sodium and potassium and their aqueous solutions. II. Quaternary system, $H_2O-NaSO_4-NaNO_3-K_2SO_4-KNO_3$, A., 246.

determination of potassium in the presence and absence of sulphate, A., 1019.

separation of potassium nitrate and recovery of other salts from crude Indian saltpetre, B., 914.

Hamid, M. A., Singh, K., and Dunncliff, H. B., ethyl hydrogen sulphate. II., A., 711.

Hamill, C. C., amalgamating means, (P.), B., 197.

Hamill, G. K., Gottschalk, V. H., and Bickling, G. W., use of glue in coated paper, B., 1008.

Hamilton, C. S., and Frazier, R., dicarboxyphenylarsinic acids. I. 2:3-Di-dicarboxyphenylarsinic acid and its anhydride, A., 1162.

Hamilton, C. S., and Johnson, F. W., action of alkyl chloroformates on hydroxy-arylsinic acids, A., 746.

Hamilton, W. F. See Scarbrough, H. G.

Hamilton, Beauchamp, & Woodworth. See Woodworth, S. E.

Hammar, G. W., magnetic susceptibilities of gases, A., 1197.

a possible explanation of the "Glaser effect," A., 1197.

Hammer, B. W. See Sherwood, F. F.

Hammerschmid, H. See Brunner, J.

Hammick, D. L., ω -mono- and dibromo-derivatives of 2-methyl- and nitro-2-methyl-quinolines and their products of hydrolysis, A., 846.

Hammick, D. L., and Holt, W. E., pseudo-ternary systems containing sulphur. I. Sulphur and quinoline, pyridine, and *p*-xylene, A., 1102.

Hammick, D. L., Hutchison, A. K., and Snell, F. R., rate of reaction of bromine with aqueous formic acid, A., 32.

Hammick, D. L., and Zvezintzov, M., rate of reaction between formic acid and iodine in aqueous solution, A., 691.

Hammond, F. See Burton, H.

Hammond, G., de-inking paper, (P.), B., 316.

reclaiming used paper, (P.), B., 316, 913*.

Hammond, G., and Fuel Development Corporation, fuel, (P.), B., 230.

Hamon, L. le W., manufacture of rubber, (P.), B., 375.

Hamon, L. le W. See also Artificial Coal Co. (Hamon Process), Ltd.

Hampel, H. See Wolff & Co.

Hampton, W. H., potential of the iron electrode, A., 803.

Hampton, W. M., annealing and re-annealing of glass. III. and IV., B., 539.

Hampton, W. M. See also Chance Bros. & Co., Ltd.

Hamsik, A., porphyrins from oxyhaematin anhydride. I. and II., A., 968, 1265.

Hamy, A., adsorption of iodine by precipitated magnesia, A., 899.

Hanaka, M. See Okochi, M.

Hance, F. E. See Dennis, L. M.

Hancock, C. W., and Commercial Solvents Corporation, preparation of butyric acid, (P.), B., 463.

manufacture of normal butyric acid from butaldehyde, (P.), B., 772*.

Hancock, G. W. See also Legg, D. A.

Hancock, J. W., dephlegmator, (P.), B., 114.

Hancock, R. S. See Hercules Powder Co.

Hancock, W. T., and Boyle, M., apparatus for refining [cracking hydrocarbon] oils, (P.), B., 431.

Hand, C. N., and Rubber Service Laboratories Co., insecticidal composition, (P.), B., 379.

Handley, F. W. See Hodgson, H. H.

Handovsky, H., influence of duration of dialysis on the ageing of ferric oxide sols, A., 23.

composition of blood-serum and its significance in the action of poisons. I. Introduction, A., 1057.

oxidation of phenols by tissues and the significance of surfaces for biological oxidation, A., 1170.

Handovsky, H., and Lohmann, K., composition of blood-serum, and its significance in the action of poisons. IV. Determination of cholesterol in blood-serum, A., 1057.

Handovsky, H., Lohmann, K., and Bosse, P., composition of blood-serum, and its significance in the action of poisons. V. State of cholesterol in blood-serum, A., 1057.

Handovsky, H., Schulz, H., and Staemmler, M., acute and chronic poisoning by heavy metals. I. Poisoning by manganese compounds, A., 320.

Handrich, W. See L G. Farbenind. A.-G.

Handy, J. See Drummond, J. C.

Hanemann, H., recrystallisation [of metals], B., 161.

Hanemann, H., and Schrader, A., martensite, B., 880.

Hanemann, H., and Traeger, L., transformations in hardened steel during tempering, B., 932.

Hangleiter, C., Schneider, A., and Zellstoff-Fabrik Waldhof, regenerating sulphurous acid and waste heat from sulphite-cellulose boilers, (P.), B., 356*.

Hangleiter, C. See also Zellstoff-Fabrik Waldhof.

Hanika, F. See Moser, L.

Hanisch, H. See Blitz, H.

Hanke, M. T., determination of tyrosine and histidine in protein and of tyramine in mixtures containing protein; histidine and tyrosine content of various proteins, A., 633.

Hanke, M. T., and Koessler, K. K., continuous dialysis or extraction apparatus, A., 377.

Hankins, O. G. See Ellis, N. R.

Hanle, W., electrical influencing of polarisation of resonance fluorescence of mercury, A., 224.

Hanley, F. See Woodman, H. E.

Hanley, W. L., jun., tunnel kilns, (P.), B., 441.

Hann, R. M., 4-keto-3-*p*-xylol-2-thiothiazolidone and some of its derivatives, A., 309.

Hann, R. M., and Markley, K. S., condensation of aldehydes with diphenyl-thiothiazolidone, A., 623.

Hann, R. M., and Sando, C. E., scyllitol from flowering dogwood (*Cornus florida*), A., 982.

Hanna, H. C. See Faber, J. F.

Hanna, M. I. See Campbell, W. R.

Hanna, R. W., Cushman, O. E., Doell, T. H., and Standard Oil Co., manufacturing lubricating oils, (P.), B., 120.

Hannel, H. See Wintersteiner, O.

Hannerz, E., resolution of a-iodopropionic acid into its optically active components, A., 936.

Hannig, M. See Fierz-David, H. E.

Hannotte, T., azeotropic properties of formic and acetic esters of saturated aliphatic alcohols, A., 671.

Hanot, (Mile) M., widening by absorption of the lines of the Balmer series, A., 765.

Hansentische Apparatebau Ges., vorm. L. von Bremen & Co., oxygen from peroxides [for respirators], (P.), B., 251.

Hanselmayr, F. See Zinke, J.

Hansen, C. E., alloy, (P.), B., 133.

Hansen, F., and Kamm, B., glycerol treatment of nephrolithiasis, A., 859.

Hansen, G., fine structure of Balmer lines, A., 101.

Hansen, H. V., calculations for the regeneration of nitrating acids, B., 612.

Hansen, J. E., and Lindsey, G. S., factors influencing the rate of pickling of sheet iron, B., 825.

Hansen, K., micro-determination of lactic acid and lactates in pure solution, A., 444.

Hansen, K. H. See Aarhus Oliefabrik A/S.

Hansen, W. C., and Bogue, R. H., system calcium oxide-ferric oxide-silica, A., 684.

Hansen, K., working of brass at high temperatures, B., 830.

Hansgirg, P., production of mineral oil products free from water, (P.), B., 574.

Hanson, C. F., and Vandervort, P., topping [distillation] plant for crude oil, (P.), B., 804.

Hanson, D., and Gayler, M. L. V., constitution of alloys of aluminium, copper, and zinc, A., 341*; B., 323*.

Hanson, D. See also Gough, H. J., and Hawkins, G. A.

Hanson, E. R. See Whitmore, F. C.

Hanson, T. H. See Forster, R. B.

Hanson & Van Winkle Co. See King, W. R.

Hanssen, H., action of paraacetaldehyde as potassium iodide, A., 1226.

Hantke, G., thermal dissociation of fluosilicates, A., 1208.

Hantzsch, A., optical and chemical investigation of solutions of alkali halides and halogen acids, A., 833.

conjugation- and complex-formulae, A., 949.

rectification of G. Höller's [theory of] alleged isomerism in the isatu series and of the so-called "structural association," A., 1255.

Hantzsch, A., and Bucierius, W., constitution of dithiocarbonic acids and their salts, A., 598.

Hantzsch, A., and Carlsohn, H., influence of the solvent on the solubility and light absorption of true salts, A., 1202.

Hanuš, J., Jilek, A., and Lukas, J., beuzoylmethylglyoxime as a precipitant of palladium salts, A., 141, 492*.

Hanuš, J., and Komorousová, B., detection of coconut oil in cacao butter and in products containing the latter, B., 140.

Hanýs, B. See Reiner, S.

Hanzlik, E. See Bruchhausen, F. von.

Hanzlik, P. J., De Edwards, and Tainter, M. L., blood and symptomatic changes following the intravenous administration of a variety of agents and solutions, A., 319.

Hapgood, C. H. See Hall, S. H.

Hara, K. See Mitsukuri, S.

Hara, R. See Sinozaki, H.

Hara, T., catalytic action. XVII. Catalytic actions of various types of reduced copper on alcohols, A., 918.

Harada, Y. See Brugsch, T.

Harang, L., crystal structure of Heusler alloys, A., 460.

Harbison-Walker Refractories Co. See Youngman, R. H.

Harburger Eisen- & Bronzewerke A.-G., recovery of oils and fats from finely divided bleaching materials or the like, (P.), B., 637.

Harder, O. E., Dowdell, R. L., and Forsyth, A. C., dilatometric method of heat treatment, B., 950.

Harding, A. J. J. See Wardlow, W.

Harding, J., and Allin, K. D., ketosis in pregnancy, A., 972.

Harding, T. S. See Moigs, E. B.

Harding, H. W., drying grinding or crushing apparatus, (P.), B., 1.

Hardman, A. F., and Kelly Springfield Tire Co., accelerator for rubber vulcanisation, (P.), B., 797.

Hardmeier, W., anomalous scattering of α -particles, A., 990.

Hardmeier, W. See also Dabey, P.

Hardy, F., anomalous flocculation in colloidal clays and soils, B., 292.

role of aluminium in soil infertility and toxicity, B., 1024.

Hardy, J. See also Warneford, F. H. S.

Hardy, H. See De Latte, J. G.

Hardy, W., and Nottage, M., studies in adhesion, I., B., 775.

Hardy, (Sir) W. B., microscopic study of the freezing of gel, A., 903.

Hare, A. See Gen. Electric Co.

Hargreaves, G. W., thallicoinine reaction, A., 967.

Hari, P., crystalline pigments obtained from normal human urine by means of *p*-dimethylaminobenzaldehyde. II., A., 858.

Haribaran, K. V. See Gibson, C. S.

Haring, H. E., simple method of measuring polarisation and resistance [of electrolytes], B., 497.

Harington, C. R., thyroxin. I. Isolation of thyroxin from the thyroid gland, A., 644.

thyroxin. II. Constitution and synthesis of diiodothyroxin, A., 724.

Harkins, W. D., drop-weight method for the determination of surface tension and the weight of the ideal drop, A., 568.

Harkins, W. D., and Gilbert, E. C., structure of films of water on salt solutions. II. Surface tension of calcium chloride solutions at 25°, A., 468.

Harkins, W. D., and Jenkins, F. A., separation of chlorine into isotopes; the light fraction, A., 220*.

Harkins, W. D., and Stone, S. B., isotopic composition and atomic weight of chlorine from meteorites and from minerals of non-marine origin, A., 553.

Harkins, W. D., and Zollman, H., interfacial tension and emulsification. I. Effects of bases, salts, and acids on interfacial tensions between aqueous sodium oleate solutions and benzene. II. Extremely small interfacial tensions produced by solutes, A., 239.

Harley, C. P., normal variation in the chemical composition of fruit spurs and the relation of composition to fruit-bud formation, A., 1065.

Harley, C. P. See also Auchter, E. C.

Harlow, I. F., Britton, E. C., and Dow Chemical Co., making phenylethyl alcohol and the like compounds, (P.), B., 893.

Harman, R. W., aqueous solutions of sodium silicates. II. Transport numbers, A., 478.

Harman, R. W., aqueous solutions of sodium silicates. III. Sodium-ion activity, A., 796.
 aqueous solutions of sodium silicates. IV. Hydrolysis, A., 907.

Harmed, B. K., sugar content of blood, A., 85.

Harmed, H. S., activity coefficient of hydrochloric acid in concentrated solutions of strong electrolytes, A., 351.

Harmed, H. S., and Åkerblöf, G., [E.M.F. measurements with] aqueous solutions of simple electrolytes, A., 706.

Harmed, H. S., and James, G. M., dissociation of water in potassium and sodium bromide solutions, A., 907.

Harmed, H. S., and Swindells, F. E., activity coefficient of lithium hydroxide in water and in aqueous lithium chloride solutions, and dissociation of water in lithium chloride solutions, A., 245.

Harnisch, C. See Sabalitschka, T.

Harnist, C., liquid purification of coal gas and the recovery of sulphur, B., 522.

Harnwell, G. P. See Barton, H. A.

Harnwell, C. H. H., sterilisation of water by chlorine and some of its compounds, B., 78.
 preparation of sterilising agents, germicides, and the like, (P.), B., 302.

Harnold, C. H. H., and United Water Softeners, Ltd., preparation of sterilising agents, germicides, and the like, (P.), B., 518*, 726.

Harpert, H. J., ammonia content of soil, and its relation to total nitrogen, nitrates, and soil reaction, B., 335.

Harpert, H. J. See also Thomas, R. P.

Harper, T. E. See Cullen, J. F.

Harries, C. See Harries, H., and Siemens & Halske A.-G.

Harries, H., and Harries, C., purification of soap solutions, (P.), B., 594, 759.
 separation of oils from soap solutions, (P.), B., 759.

Harrington, A. L., and Pittsburgh Plate Glass Co., melting and fining glass, (P.), B., 128.

Harris, C. P., and Elias, N. M., diazotisation of organic compounds, (P.), B., 578.

Harris, C. R. See Wheeler, A. S.

Harris, D. T., action of light on blood, A., 635.
 photo-oxidation of plasma A., 635.
 velocity of photo-oxidation of proteins and amino-acids, A., 635.

Harris, G. D., and Industrial Drier Corporation, treating [concentrating] liquid materials, (P.), B., 81.
 drying semi-liquid materials, (P.), B., 81.
 drying apparatus, (P.), B., 81.
 drying, (P.), B., 81.
 method of drying and oxidising materials in suspended condition; drying materials, (P.), B., 113.

method and apparatus for drying, including solvent recovery, (P.), B., 113.

Harris, H., apparatus for refining metals, (P.), B., 18*.
 treatment of [precipitation of tin from] solutions containing alkali oxyx salt of tin [and arsenic], (P.), B., 186.

treatment of alkali liquor [obtained in purification of lead], (P.), B., 236.

apparatus for refining or separating metals, (P.), B., 283*.
 refining lead, (P.), B., 283*.
 treating impure molten metals, (P.), B., 496*.
 removal of arsenic from tin, (P.), B., 921.

Harris, J., gaseous fuel, (P.), B., 119, 524, 573.
 gaseous fuel [for metal cutting], (P.), B., 862.

Harris, J. See also Rose, J. R.

Harris, J. A., relationship between concentration of soil solution and physico-chemical properties of leaf-tissue fluids of Egyptian and Upland cotton, B., 842.

Harris, J. A., Hoffman, C. T., and Hoffman, W. F., sulphate content of the leaf-tissue fluids of Egyptian and Upland cotton, A., 441.

Harris, J. A., Hoffman, W. F., Sinclair, W. B., Johnson, A. H., and Evans, R. D., leaf-tissue fluids of Egyptian cottons, A., 548.

Harris, J. A., and Hopkins, B. S., rare earths. XXIIT. Element No. 61. I. Concentration and isolation in the impure state, A., 810.

Harris, J. A., Yntema, L. F., and Hopkins, B. S., rare earths. XXIII. Element 61. II. X-ray analysis, A., 780.

Harris, J. E., and Western Electric Co., coating electrodes [for electric discharge tubes], (P.), B., 65.

Harris, J. P. G. See Morton, J., and Scottish Dyes, Ltd.

Harris, J. M., jun. See Lucasse, W. W.

Harris, K. See Thomas, M. D.

Harris, L., absorption spectrum of formic acid vapour in relation to molecular associations, A., 1079.

Harris, L., Bates, S. J., and MacInnes, D. A., relative intensities of reflexion of X-rays from the principal atomic planes of powdered sodium chloride, A., 935.

Harris, M. M., Lasker, M., and Ringer, A. I., effect of muscle and insulin on dextrose *in vitro*, A., 1180.

Harris, N. MacL., Endo's medium [for *Bacillus coli*], B., 78.

Harris, W. E. See Field, S.

Harrison, A. C., machine for transverse tests of clay and glass laboratory specimens, B., 127.
 sifting of granular or pulverulent materials [potter's slip], (P.), B., 323*.

Harrison, D. C., and Thirlow, S., secondary oxidation of substances of physiological interest, A., 641.

Harrison, D. N. See Dobson, G. M. B.

Harrison, G. A. See Channon, H. J.

Harrison, G. J., and King, C. J., age of seedlings as a factor in the resistance of maize to sodium chloride, B., 293.

Harrison, G. R., intensities of absorption lines in alkali metal vapours, A., 1070.

Harrison, H. A., unsymmetrically substituted dinitro- and diamino-derivatives in the stilbene and tolane series. II. Mode of addition of water to 3:4'-dinitro- and -diamino-tolane, A., 827.

Harrison, H. A., and Royle, F. A., nitration of β -naphthoic acid and some new amino- and nitro-naphthoic acids, A., 287.

Harrison, H. A., and Wood, H., unsymmetrically substituted dinitro- and diamino-derivatives in the stilbene and tolane series. I. Elimination of hydrogen chloride from 3:4'-dinitrostilbene dichloride, A., 604.

Harrison, H. C., cyanite-clay refractories, I., B., 631.

Harrison, H. C. See also McCaughey, W. J.

Harrison, L. M. See Desha, L. J.

Harrison, P. W. B., Kenyon, J., and Phillips, H., dependence of rotatory power on chemical constitution. XXIX. Resolution of sulphoxides into their optically active forms, A., 1031.

Harrison, P. W. B., Kenyon, J., and Shepherd, J. R., dependence of rotatory power on chemical constitution. XXVIII. *d*-sec-Butylbenzene, A., 599.

Harrison, T. H., concurrent variations in the thermionic and photo-electric emission from platinum and tungsten with the state of the surfaces of these metals, A., 552.

Harrison, W. F. See Morgan, G. T.

Harrison, W. N. See Wolfram, H. G.

Harrow, B. See Klein, A., and Novello, N. J.

Harsch, J. W., and Leeds & Northrup Co., electric-furnace system, (P.), B., 446.

Harshaw, W. J., and Harshaw, Fuller, & Goodwin Co., separating cobalt from nickel, (P.), B., 885.

Harshaw, Fuller, & Goodwin Co. See Harshaw, W. J.

Hart, P. A. *van der* spectra of tin, lead, antimony, and bismuth in a magnetic field, A., 874.

Hart, E. B., Steenbock, H., Elvehjem, C. A., Scott, H., and Humphrey, G. C., calcium assimilation. VII. Influence of sunlight on calcium equilibrium in milking cows, A., 541.

Hart, E. B., Steenbock, H., and Lepkovsky, S., is antirachitic factor [vitamin-D] of cod-liver oil when mixed with grains, destroyed through storage? B., 74.

Hart, E. B., Steenbock, H., Lepkovsky, S., and Halpin, J. G., nutritional requirement of the chicken. VI. Vitamin-C, A., 437.

Hart, E. B. See also Elvehjem, C. A., Lepkovsky, S., and Steenbock, H.

Hart, L. See McDonnell, U. C.

Hart, M. C., and Heyl, F. W., corpus luteum. V. Lipins of the acetone extract, A., 424.
 corpus luteum. III. Presence of free amino-acids in the acetone extract, A., 837.

Hart, M. C. See also Cartland, G. F.

Hart, P. C. See Laqueur, E.

Harteneck, A. See Felix, K., and Waldschmidt-Leitz, E.

Harter, H., catalytic synthesis of ammonia, (P.), B., 783.

Harter, H., and Otto, A. T., & Sons, catalytic synthesis of ammonia, (P.), B., 12, 192*.

Hartford-Empire Co., machinery for manufacturing glass-ware, (P.), B., 918*.
 forming sheet glass, (P.), B., 1015*.
 lehrs for annealing glassware, (P.), B., 1015*.

Hartford-Empire Co. See also Willets, P. G.

Hartig, C. H., devices for dyeing or similarly treating materials with liquids, (P.), B., 78*.

Hartl, K. See Starlinger, W.

Hartley, H. See Davies, H., and Nonhebel, G.

Hartman, A. M. See Meigs, E. B.

Hartman, E. W., and Hartman Interests, Inc., apparatus for extracting gas from bituminous materials, (P.), B., 907.

Hartman, E. W., and Bolliger, A., curve of inorganic blood phosphates during the sugar tolerance test; significance in diagnosis and prognosis, A., 317.

Hartman, H., heats of combustion of homologous and isomeric dicarboxylic acids and their anhydrides, A., 800.

Hartman, H. See also Verkade, P. E.

Hartman Interests, Inc. See Hartman, E. W.

Hartmann, E. See Frank, E.

Hartmann, F. See Hofmann, K. A.

Hartmann, M., and Isler, H., ovarian hormone, A., 1064.

Hartmann, M. L., and Carborundum Co., [making] zirconium carbide, (P.), B., 440.

Hartmann, M. L., and Westmont, O. B., thermal insulation of electric furnaces, B., 953.

Hartmann, M. L., Westmont, O. B., and Morgan, S. F., determination of the bulk and pore volumes of refractory materials, B., 631.

Hartmann, S., decomposition of the double ammonium fluorides of the elements of the titanium group, A., 1007.

Hartogs, J. C., manufacture of artificial silk, (P.), B., 315.
 spinning viscose, (P.), B., 533.

Hartree, D. R., doublet and triplet separations in optical spectra as evidence whether orbits penetrate into the core, A., 7.
 optical spectra of different atoms of the same electronic structure. II. Aluminium-like and copper-like atoms, A., 985.

Hartree, D. R. See also Fowler, R. H.

Hartridge, H., and Roughton, F. J. W., apparatus for measuring the velocity of very rapid chemical reactions, II., A., 1213.

Hartshorne, N. H. See Carter, S. R.

Hartung, E. J., microbalance. II. Photochemical decomposition of silver chloride, A., 34.
 microbalance. III. Filtration and determination of very small amounts of material, A., 593.
 microbalance. IV. Photochemical decomposition of silver iodide, A., 808.

Hartwell, F. J. See Coward, H. F.

Hartwell, G. A., mammary secretion. VI. Vitamin-B and the lactating rat's diet. 1. The quantitative relation of vitamin-B to protein. 2. Vitamin-B requirements of the lactating and non-lactating rat, A., 207.
 dietic value of oatmeal proteins, A., 974.

Hartwig, W., crystal structure of cinnabar isomorphs, A., 604.

Harty, W. A., [fused silica] refractory material, (P.), B., 128.

Harty, W. A., and Moore, F. W., rotary dryer, (P.), B., 256*.

Harvey, C. E. See McBain, J. W.

Harvey, C. O., determination of the strength of glacial acetic acid, B., 564.

Harvey, D. See Magee, H. E.

Harvey, E. H., and Schutte, H. A., vapour pressure of sulphur monochloride, A., 1088.

Harvey, E. M., phloridzin. I. Significance of phloridzin in apple and pear tissue. II. Hydrolysis and determination of phloridzin, A., 981.

Harvey, E. N., specificity of luciferin and luciferinase, A., 1059.
 bioluminescence and fluorescence in the living world, A., 1080.
 inhibition of *Cypridina* luminescence by light, A., 1173.

Harvey, H. W. See Atkins, W. R. G.

Harvey, L. C., furnaces [for pulverised or liquid fuels], (P.), B., 807.

Harvey, P. P., and Hollord, H. J., centrifugal separating apparatus [for treating mineral oils], (P.), B., 526.

Harvey, W. G., and American Magnesium Corporation, producing calcium-copper alloy, (P.), B., 133.
 treating molten metals [aluminium-bronze] with calcium-copper alloys, (P.), B., 133.

Harvey, W. G. See also Bakken, H. E.

Harwood, J. See Dixon, H. B.

Hasche, R. L., effect of moisture and paraffin surface on the rate of reaction of nitric oxide and oxygen, A., 1106.

Haschke, V., and Sutra, R., oxidation of harmaline and bromoharmaline, A., 531.

derivatives of harmalol and harmol, A., 1264.

Hashimoto, N. See Suzuki, U.

Haskins, H. D. See Holbrook, W. P.

Haslam, J. See Challenger, F.

Haslam, R. T., Adams, F. W., and Kean, R. H., rate of solution and availability of commercial limes, B., 190.

Haslam, R. T., and Hermann, E. C., effect of time and temperature of burning on the properties of lime, B., 914.

Haslam, R. T. See also Rembert, E. W.

Hass, F. See Fries, K.

Hass, H. B. See Evans, W. L.

Hassé, H. R., Langevin's theory of ionic mobility, A., 219.

Hassel, O. See Anderson, G. C.

Hasselblatt, M., water vapour pressure and electrical conductivity of wood in relation to its water content, B., 747.

Hasseleiter, A., and Ingold, C. K., formation of unsaturated and cyclic compounds from halogenated open-chain derivatives. VIII. Products derived from pinenic acid; application of Bischoff's dynamic hypothesis, A., 820.

polycyclic structures in relation to their homocyclic unsaturated isomerides. VII. Tautomerism corresponding with that of nitrosophenol and quinone-oxime in the cyclopentane, A., 963.

Hasseler, V., determination of silver in zinc retort residues, B., 95.

Haste, J. H. See Kodak, Ltd.

Hastie, S. H., character in pot still whisky, B., 604.

technical control of purchase of barley, malt, and yeast for distilling, B., 344.

Hastings, A. B., and Sendroy, J. jun., effect of variation in ionic strength on apparent first and second dissociation constants of carbonic acid, A., 25.

Hastings, A. B. See also Van Slyke, D. D.

Hastings, E. G. See Lepkovsky, S.

Hata, C. See Kafuku, K.

Hatano, J., partial hydrolysis of sucrose-phosphoric acid to *d*-kevulose and dextrose-phosphoric acid, A., 51.

Hatano, J. See also Neuberg, C.

Hatch, F. G., drying apparatus, (P.), B., 808.

Hatcher, R. A., and Weiss, S., [rate of injected] quinine, A., 1273.

Hatcher, W. H., and Holden, G. W., hydrogen peroxide as an oxidising agent in acid solution. III, A., 270.

Hatfield, H. S., magnetic [ore] separators, (P.), B., 691*.

Hatfield, W. H., modern developments in steels resistant to corrosion, B., 57.

Hathaway, L. E., jun. See Fiske, C. H.

Hatmaker, J. R., condensed milk and method of making it, (P.), B., 766.

Hatachek, E., influence of light on lead chromate bands, A., 20.

silver chromate rings in silicic acid gel, A., 349.

apparent increase of viscosity of ammonium oleate solutions at higher velocities, A., 470.

Hatschek, E., and Jane, R. S., viscosity of ammonium oleate solutions, A., 240.

shear modulus and relaxation of sols, A., 1003.

viscosity of suspensions of rigid particles and their dependence on the shear gradient, A., 1097.

Hatta, S., effects of lead tetraethyl upon the deterioration of turbine oils, B., 307.

Hauk, F. See Neumann, B.

Hauenschmid, A., grain size of Po-tland cement and its influence on the rate of hydration, B., 879.

Hauge, S. M., and Carrick, C. W., water-soluble growth-promoting and anti-nutritive substances, A., 1065.

Haughton, J. L., and Griffiths, W. T., β -transformation in copper-zinc alloys, A., 344*; B., 328*.

Haurowitz, F., blood pigments. IV. Sulphhemoglobin, A., 314.

production of stable metal sols in benzene, A., 1202.

Hausmann, O., distillation of fatty acids, B., 200.

purification of glycerin water, B., 693.

Hauschild, M. See Nene Gliihlampen-Ges.m.b.H.

Hauser, E. A., two-phase structure [of rubber], B., 100.

application of microscopy to colloid chemistry, B., 175.

origin of [X-ray] interferences in the stretching of rubber, B., 960*.

Hauser, E. A., and Dannenberg, H., mastication [of rubber], B., 333.

Hauser, E. A., and Mark, H., structure of stretched caoutchouc, A., 1098; B., 334, 761.

origin of the [X-ray] interferences in the stretching of rubber, B., 638.

Hausmeister, P., production of compressed gases by electrolysis, (P.), B., 499*.

Hauswirth, A. See Society of Chemical Industry in Basle.

Haut-Fourneaux & Acieries de Differdange-St.-Ingbert-Rumelange Société Anonyme, and Ries, P., increasing the efficiency of Cowper stoves in existing blast-furnace plants, (P.), B., 675*.

Havard, R. E., and Reay, G. A., normal variations of the inorganic phosphate of blood, A., 192.

excretion of phosphate during water diuresis, A., 424.

influence of exercise on the inorganic phosphates of the blood and urine, A., 428.

Haven, W. A., coke testing, B., 651.

Havestadt, L. See Fricke, R.

Havighurst, R. J., X-ray reflexions from mercuric iodide, A., 114.

effect of crystal size on intensity of X-ray reflexion, A., 780.

intensity of reflexion of X-rays by lithium, sodium, and calcium fluorides, A., 780.

absorption of X-rays in crystalline compounds, A., 987.

parameters in crystal structure; [structure of] mercurous halides, A., 995.

Hawes, M. See Thomas, W.

Hawkins, G. A., Hanson, D., and Ford, (Miss) G. W., mechanical properties of four heat-treated spring steels, B., 827.

Hawkins, L. A. See Barger, W. R.

Hawley, C. G., and People's Savings and Trust Co. of Pittsburgh, combustion of ash-containing fuels, (P.), B., 732.

Hawley, E. E., and Murkin, J. R., altered metabolism of normal animals under insulin treatment, A., 1179.

Hawley, F. G., determination of fluorine [in ores], B., 672.

Hawley, L. F., fifty years of wood distillation, B., 812*.

Hawlik, H., manufacture of artificial filaments, films, plates, etc., (P.), B., 314.

Hawlik, H., and Sindl, O., production of alkali-cellulose, (P.), B., 627.

Haworth, R. D., and Lapworth, A., preparation of *p*-bromophenylhydroxylamine by the emulsification process, A., 161.

Haworth, R. D., and Perkin, W. H., jun., conversion of berberine into β -homochelidonine (*o*-allocryptopin), A., 417.

synthesis of cryptophine and protopine, A., 964.

Haworth, R. D., Perkin, W. H., jun., and Rankin, J., resolution of *dl*-dicentrine, A., 310.

Haworth, R. D., Perkin, W. H., jun., and Stevens, T. S., 3:4-methylenedioxy-bomophthalic acid, A., 951.

Haworth, R. D. See also Campbell, R.

Haworth, W. N., and Hirst, E. L., structure of fructose, γ -fructose, and sucrose, A., 1126.

Haworth, W. N., and Maw, W., sugar carbonates. II. Derivatives of arabinose and xylene, A., 940.

Haworth, W. N., and Nicholson, V. S., structure of lactones from simple sugars; trimethyl- γ -arabonolactone and the supposed β -gluconolactone and β -mannolactone, A., 1025.

Haworth, W. N., and Sedgwick, W. G., new crystalline forms of trimethyl-glucose and dimethylglucose, A., 1228.

Haworth, W. N., and Westgarth, G. C., synthesis of derivatives of γ -xylose, A., 600.

Haworth, W. N. See also Charlton, W., Cooper, C. J. A., and Drew, H. D. K.

Hay, G. S., bituminous emulsions, (P.), B., 120, 409, 632.

bituminous paints and like coating and impregnating compositions, (P.), B., 595.

Hay, G. S., and Asphalt Cold Mix (1925), Ltd., bituminous emulsion, (P.), B., 479*.

Hay, G. S. See also Braun, C. A.

Hay, J. T., and United Alloy Steel Corporation, annealing steel sheets, (P.), B., 195.

Hay, K. G. See McBain, J. W.

Hay, R. See Andrew, J. H.

Hayashi, H., and Matsui, M., reaction between sodium phosphates and calcium hydroxide, A., 1016.

Hayashi, K., endosmotic investigation of the influence of dissolved electrolytes on the electrical charge of sparingly soluble powders, A., 904.

Hayashi, K. See also Michaelis, L.

Hayashi, T. See Kubota, B.

Hayden, H. P. See Forrest, C. N.

Hayes, A. See Diederichs, W. J., and Maxwell, H. L.

Hayes, C., apparatus for carbonising coal; carbonising process, (P.), B., 812.

Hayes, C., and Coal Carbonisation Co., carbonisation of coal, (P.), B., 861.

Haymann, H. See Spiegel, L.

Hayn, G., coal-dust furnaces, (P.), B., 3*.

Hayner, C. R. See Mahin, E. G.

Haynes, F., improved method of preparation of Weigert's elastin stain, A., 708.

Haynes, J. P. See Howe, J. L.

Haynes, P. E., electrolytic production of alkali metals, (P.), B., 922.

Haynes, P. E., and Linde Air Products Co., [magnetic] separation of gaseous or liquid mixtures, (P.), B., 472.

Hayward, C. R. See Smith, C. S.

Hazeldine, N. F. W., apparatus for distilling hydrocarbons, (P.), B., 526.

Hazmburk, R. S. ton. See Brown, A. W.

Head, R. E. See Tucker, E. L.

Heany, J. A., preparation of rare metallic oxides [for electric lamps], (P.), B., 334.

Heap, T., and Robinson, R., synthesis of kaempferide and isorhamnetin, A., 1149.

Heaps, C. W., emissivity of bismuth in a magnetic field, A., 784.

Hearn, J. E. See Lyttle, J. D.

Heath, S. B. See Cottinger, P.

Heaton, N., influence and elimination of coarse particles [from pigments], B., 955.

Hebel, H., gas production, (P.), B., 861.

Heberlein & Co. A.-G., production of pattern effects on woven fabrics, (P.), B., 485.

Hebert, R. M. L. G., and Vergé, A., treating cotton textiles to impart a linen-like appearance thereto, (P.), B., 125.

Hebler, F., degree of dispersity of litharge as a criterion of its suitability for use as a drier for boiled oils, B., 99.

relation between the number and size of the particles and the light absorption of graphite suspensions, B., 638.

Hechenbleikner, J., and Chemical Construction Co., apparatus for producing sulphurous acid gases, (P.), B., 707.

Hechenbleikner, J., and Oliver, T. C., continuously separating [acid] petroleum sludge, (P.), B., 701.

separation of petroleum sludge, (P.), B., 1005.

Hechtl, H. See Barrensheen, H. K.

Hecht, O. See Vortmann, G.

Heckmann, W., reverberatory refining of copper; influence of prolonging the blowing on the impurities in and properties of the metal, B., 243.

Heckscher, H. See Bing, H. I.

Heckzo, T., action of potassium iodide on vanadophosphoric acid, A., 1020.

rapid volumetric determination of large quantities of manganese in technical iron alloys, B., 791.

Hedderheimer Kupferwerk & Süddeutsche Kabelwerke, A.-G., and Kirchner, A., production of artificial iron oxide (colcothar, red ochre, etc.) containing no free acids, (P.), B., 202.

Hedenburg, O. F., and Moburg, F. O., fungicide and insecticide, (P.), B., 208.

Hedenburg, O. F. See also Seil, G. E.

Hedges, E. S., variation of the angles of crystals during growth, A., 563.

liquid-line corrosion, A., 581.

periodic phenomena at anodes of copper and silver, A., 807.

alternating-current cell, A., 912.

periodic phenomena at anodes of magnesium, zinc, cadmium, mercury, tin, and lead, and at an unattackable anode, A., 1213.

Hedges, J. J. See also Barker, S. G.

Hedin, S. G., applicability of law of mass action to action of enzymes, A., 756.

Hedley, B. See Shut, F. T.

Hedström, I. See Euler, H. ton.

Hedwall, J. A., instantaneous decomposition on heating sulphides, carbides, silicides, phosphides, silicates, and spinels with alkaline-earth oxides, A., 368.

Hedvall, J. A., thermal decomposition of siderite, rhodochrosite, and dolomite, A., 684.
 physico-chemical processes in the sintering of powders without fusion, A., 1093.
 Hedvall, J. A., and Norström, E., interchange of radicals between solid phases. V. Reactions of alkaline-earth oxides with sulphides, carbides, silicides, and phosphides, A., 696.
 Hedworth, W. A., liquid fuel burners, (P.), B., 909*.
 Heel, A. C. S. van, monochromatic excitation of fluorescence [in uranyl salts], A., 455.
 Heel, A. C. S. van. See also Dicke, G. H.
 Heenan, J. N. D., and Power Specialty Co., method of conveying heat energy, (P.), B., 2.
 Heesch, K., ultramicroscopic investigation of the structure of the vitreous humour in animal eyes, A., 1098.
 Heese, E., regenerative cell of manganese dioxide, coal, and zinc [feeble current accumulator], (P.), B., 835.
 Heess, W. See Küster, W.
 Heftner, L. R. W., treatment of gas liquor; recovery of phenols from ammoniacal liquor, (P.), B., 147.
 Heftner, L. R. W., and Tiddy, W., treatment of gas liquor and other waste liquors for the separation and recovery of phenol therefrom, (P.), B., 624*. treatment of gas liquors for removing phenolic impurities therefrom, (P.), B., 1006*.
 Heftner, L. R. W., Tiddy, W., and Rainey Wood Process Corporation, apparatus for treating gas liquor, (P.), B., 862.
 apparatus for recovering phenols from ammoniacal liquor, (P.), B., 862.
 treatment of gas liquor, (P.), B., 862.
 recovery of cyanide [from ammoniacal gas liquor], (P.), B., 1004.
 Heffey, D. G. See Padgett, F. W.
 Hefti, F. See Schinor, C.
 Hegan, C. P. See Reed Air Filter Co.
 Hegan, H. J., and Courtaulds, Ltd., manufacture of threads, filaments, strips, or films from cellulose compounds, (P.), B., 1010*.
 Hegan, H. J. See also Courtaulds, Ltd.
 Hegel, K., determination of carbon disulphide and hydrogen sulphide in gaseous mixtures [from decomposition of viscose], B., 399.
 Helianzan, N., effects of ions on liver and carbohydrate metabolism. I. Effect of electrolytes on hepatic secretion. II. Effect of electrolytes on carbohydrate metabolism. III. Effect of Ca and Na on glucogenetic function of the liver, A., 426.
 Heide, L. van der, danger of inversion with sulphurous acid in sugar manufacture, B., 961.
 Heidelberger, M., Goebel, W. F., and Avery, O. T., soluble specific substance of a strain of Friedländer's bacillus, A., 515.
 chemical and immunological relationships of *Pneumococcus* type II and a strain of Friedländer's bacillus, A., 545.
 soluble specific substance of *Pneumococcus*, A., 545.
 Heidenhain, J. See Hahn, O.
 Heidinger, R. See Grube, G.
 Heilbron, I. M., Kamm, E. D., and Owens, W. M., unsaponifiable matter from the oils of clasmobranch fish. I. Constitution of squalene (spinacene), A., 816.
 Heilbron, I. M., and Zaki, A., styrlybenzopyrylum salts. VII. Conversion of 7-methoxy-2:3-dimethylchromone into styrlybenzopyrylum salts, A., 1042.
 Heilbron, I. M. See also Atkinson, H., and McGookin, A.
 Heilbrunn, L. V., colloid chemistry of protoplasm, A., 902.
 Heilig, R. See Donath, J.
 Heimann, H. See Stickstoffwerke G.m.b.H.
 Hein, F., and Eissner, W., organo-chromium compounds. VI. Chromium tetraphenyl, A., 531.
 Hein, F., and Späte, R., organo-chromium compounds. VII. Products of the action of magnesium *p*-bromophenyl bromide on sublimed chromium chloride, A., 628.
 ultrafiltration of colloidal solutions of organic chromium compounds in ethylene bromide, A., 903.
 Hein, M. A. See Snider, H. J.
 Heindl, R. A., progress report on investigation of sagger clays, B., 539.
 Heindl, R. A. See also Geller, R. F.
 Heinemann, A. See Allwater, R.
 Heinemann, H. See Lindemann, H.
 Heinrich, C., application of the method of Kuribaum and Günther-Schulze to the photometry of spectral lines, A., 649.
 temperature of the acetylene flame, A., 669.
 spectrophotometric investigation of the visible light of the negative glow in neon and helium, A., 874.
 Heinrich, F., and Voigt, W., Oberhoffer's etching mixture, A., 707.
 Heinrich, P. M. See Müller, W.
 Heinrich, R. See Siemens-Schuckertwerke G.m.b.H.
 Heinrichs, H., and Hertrich, M., error introduced by the presence of bismuth in the colorimetric determination of iron in red lead; colorimetric determination of bismuth, B., 372.
 Heinrichs, H., and Tepohl, W., optical glass, B., 238.
 Heintz, L., titration of the bitter substances of hops, B., 171.
 Heintze, E. See Farbenfabr. vorm. F. Bayer & Co.
 Heisch, E. See Queau, A. L. J.
 Heise, G. W., and National Carbon Co., galvanic cell of the copper oxide type, (P.), B., 164.
 Heisenberg, W., and Jordan, P., quantum mechanics and the anomalous Zeeman effect, A., 767.
 Heiter, W., thermodynamics and statistics of quantum processes (intensity of spectral lines), A., 554.
 theory of concentrated solutions. I. Theory of hydration. II. Thermodynamics of binary mixtures, A., 1006.
 Heitmann, M. J., emulsified solid greases, (P.), B., 478.
 Heitmann, O., recovery of benzol from gases, (P.), B., 941.
 Hekma, E., detection of separated [centrifuged] milk in whole milk, B., 212.
 nature of the agglutination of fat globules. V. Influence of natural and separated skim milk on the creaming of washed milk-fat globules, B., 337.
 leucocyte content and catalase number of natural and separated cream, B., 337.
 Heitkoen, L. See Welken, W. A.
 Heipner, A. See Pipereant, P.
 Held, R. See Brigl, P.
 Hele, T. S. See Callow, E. H., and Coombs, H. G.
 Hele-Shaw, H. S., and Beacham, T. E., separation of liquids from gases, (P.), B., 3*.
 Hele-Shaw, H. S., and Pickard, J. A., edge filtration, (P.), B., 423.
 Helfenstein, A., and Helfenstein-Elektro-Ofen Ges., metallurgical furnace, (P.), B., 754.
 Helfenstein-Elektro-Ofen Ges. See Helfenstein, A.
 Helfer, L., new decahydroisoquinoline, A., 1150.
 Helferich, B., Bänerlein, K., and Wiegand, F., synthesis of gentiobiose, A., 386.
 Helferich, B., Klein, W., and Schäfer, W., specific action of α -glucosidase from yeast, A., 274.
 synthesis of a disaccharide-glucoside. II., A., 386.
 Helferich, B., and Kosche, W., compounds of the aldoses with carbamide and their application to the synthesis of glucosides containing nitrogen, A., 273.
 Helferich, B., and Sieber, H., [triphenylcarbinol hydrochloride], A., 517.
 Hell, J., tanning skins and hides, (P.), B., 138*. treatment of hides and skins prior to tanning, (P.), B., 839.
 Heller, C., ring systems containing a para-bridge, A., 286.
 Heller, G., [with Fuchs, R., Jacobson, P., Raschig, M., and Schütze, E.], transitions from the indole to the quinolinc series. II., A., 620.
 Heller, G., and Lauth, H., new isomerism in the isatin series. VII., A., 740.
 action of sodoisatin on ethyl chloroformate, A., 937.
 Heller, H., determination of fatty acids in fats for custome purposes, B., 372.
 Heller, H., metamorphosis of insects. II. Apparatus for investigation of the gaseous metabolism of small animals, A., 197.
 Heller, M. See Kohn, M.
 Heller, R. See Stock, A.
 Hellmann, H., and Zahn, H., dielectric constants of good conducting solutions of electrolytes, A., 778.
 dielectric constant of dilute aqueous solutions of electrolytes, A., 1193.
 Hellings, G., and Troedsson, J. S. W., composition of Swedish generator shale oils, B., 394.
 Helm, L., production of resinous condensation products from polyhydric phenols and formaldehyde, (P.), B., 889.
 Helmer, G. See Coehn, A.
 Helms, H. B. See Appleton, W. H.
 Helps, G., gas manufacture, (P.), B., 572.
 gas burners, (P.), B., 941*.
 Helser, P. D., laboratory load furnace [for testing refractories], B., 155.
 Heimelmayer, F., and Meyer, T., effect of different substituents on the stability of carboxyl groups in substituted aromatic acids; effect of a second carboxyl group and relative influence of chlorine and bromine, A., 403.
 Hemsteger, S. E., and Stiel, W. C., use of Georgia and North Carolina kaolins in a semi-porcelain body, B., 917.
 Hench, P. S., and Aldrich, M., urea retention; its determination by the mercury-combining power of blood, A., 1271.
 Hencky, K. See Farbenfabr. vorm. F. Bayer & Co.
 Henderson, A. H., extraction of copper from matte, (P.), B., 63.
 Henderson, C. T., and Rosenstein, L., wood preservation, (P.), B., 193.
 Henderson, E. See Norman, A. R.
 Henderson, G. A., vulcanised material, (P.), B., 761.
 Henderson, G. G., and Robertson, A., oxidation of sabinol with hydrogen peroxide, A., 1252.
 Henderson, G. G., Robertson, J. M., and Kerr, C. A., caryophyllene series. I., A., 298.
 Henderson, H. See Pritchard, G. L.
 Henderson, J. A. R. See British Dyestuffs Corp., Ltd.
 Henderson, J. C., and Driver-Harris Co., manufacture of cast-iron, (P.), B., 368.
 Henderson, J. M., and Magee, H. E., effect of ultra-violet light on the calcium and phosphorus metabolism of the lactating animal, A., 638.
 Henderson, J. M. See also Leitch, I.
 Henderson, V. E. See Brown, W. E.
 Henderson, F., method for determining the accuracy of analyses of ethyl iodide vapour for measurements of the circulation of the blood in man, A., 984.
 Hendler, L., and United States Secretary for War, tracer mixture, (P.), B., 902.
 Hendrick, C. F., coating ferrous metals to make them rust-proof, (P.), B., 163.
 Hendrick, J., loss of nitrates from cropped soils, B., 959.
 Hendrick, J., and Newlands, G., Scottish drift soil. IV. Exchangeable bases, B., 990.
 Hendricks, S. B., equilibrium in the system arsenic pentoxide-barium oxide-water (acid section), A., 358.
 Hendricks, S. B., Bacot, A. M., and Young, H. C., relative toxicity of the arsenates of calcium, B., 208.
 Hendricks, S. B., and Pauling, L., crystal structures of sodium and potassium trinitrides and potassium cyanate and the nature of the trinitride group, A., 113.
 Hendricks, S. B. See also Huggins, M. L., and Pauling, L.
 Hendrix, B. M., Fay, M., Calvin, D. B., and Bodansky, M., effect of excretion of acids and bases on development of acidosis in experimental diabetes, A., 1063.
 Hendrixson, W. S., increase in potential when some reducing agents are added to certain oxidants, A., 1009.
 Hene, E., production of potassium sulphite, bisulphite, and metabisulphite, (P.), B., 457.
 production of sodium and potassium cyanides, (P.), B., 583.
 manufacture of alkali carbonates or bicarbonates and hydroxides, (P.), B., 630.
 Heneage, E., distillation of lignites, (P.), B., 308.
 Henglein, F. A., velocity of the gas reaction $2\text{NO} + \text{Cl}_2 \rightarrow 2\text{NOCl}$ in a magnetic field, A., 690.
 Henglein, F. A., and Grzenkowsky, M., adsorption of gases [ammonia, sulphur dioxide, chlorine] by wood charcoal at pressures exceeding 1 atm., B., 143.
 Henke, C. O. See Brown, O. W.
 Henke, R. See Weisengerger, G.
 Henkel & Co., manufacture of dry halogen-calcium-starch preparations, (P.), B., 561.
 Henkel & Co., and Jacobi, M., regeneration of the electrolytic liquor from the electrolytic production of perborate, (P.), B., 876.
 Henne, A. See Walle, H. van de.
 Hennebette, H. See Gontal, E.
 Hennichs, S., activity and iron content of highly active catalase preparations, A., 432.
 catalase and its relationship to biological oxidations; liver catalase. II., A., 756, 1175.
 Hennig, H. See Weygand, C.
 Hennig, K. See Rheinboldt, H.
 Henning, N., and Schaefer, W., photoactivity, A., 1279.

Henninger, G. See Farbw. vorm. Meister, Lucius, & Brüning.
 Henninger, W. See Lennartz, A.
 Hensel, A. See Stobbe, H.
 Henny, V. See Egloff, G.
 Henri, V., and Schou, S. A., ultra-violet absorption spectrum of formaldehyde vapour; new type of spectrum for Y-shaped molecules, A., 771.
 new type of absorption spectrum; double rotational quantification in formaldehyde, A., 883.
 Henri, V. See also Errera, J.
 Henrich, F., microchemical methods, A., 589.
 Henrjean, F., and Kopaczewski, W., composition of *Scilla* and its tonicardiac principle, A., 982.
 Henriksen, A. See Padgett, F. W.
 Henry, A. M., and Illinois-Pacific Glass Co., annealing glass, (P.), B., 585.
 Henry, P., diffusion of solids, A., 895.
 Henry, T. A., and Sharp, T. M., mercuration of alkylphenols and alkylphenol-aldehydes, A., 1162.
 Hensen, K. See Ados G.m.b.H.
 Henshaw, D. M. See Cooper, C.
 Henszelmann, S. See Csapó, J.
 Henton, H. M., pyro- and hydro-treatment of magnesite and dolomite, B., 485.
 Henrich, W. See Duisberg, W., and Farbenfabr. vorm. F. Bayer & Co.
 Henschel, H. See Emlden, G., and Müller, Erich.
 Henze, M., interaction between chloroacetic acid, potassium cyanide, and benzaldehyde, A., 961.
 Hepburn, H. C., influence of electrolytes in electro-endosmosis, A., 1100.
 Hepburn, J. See Campbell, W. R.
 Hepburn, J. R. I., freezing of inorganic hydrogels, A., 473.
 Hepburn, J. S., by-product yeast [as source of vitamin-B₁], B., 105.
 Hepke, K., decomposition of aluminium silicates, (P.), B., 666.
 Hepner, B., bismuth compounds. II., A., 488, 924*.
 Hepner, B., and Likiernik, A., bismuth compounds. I., A., 487, 924*.
 Heppenstall, C. W., and Heppenstall Forge & Knife Co., alloy, (P.), B., 674.
 Heppenstall Forge & Knife Co. See Heppenstall, C. W.
 Hennes, J., storing mixed fertilisers containing ammonium nitrate, (P.), B., 417, 843.
 Hepworth Co., S. S. See Olcott, C. A.
 Heraeus, W. C. See Haagn, B.
 Heraeus-Vacuumschmelze A.-G. See Siemens-Schuckertwerke.
 Herbert, A., and Rylly, C. E., coal pulverising machines, (P.), B., 733*.
 Herbert, A., and Jackson, R., coal pulverising machines, (P.), B., 780*.
 Herbert, A., Vernon, P. V., and Jackson, R., coal pulverising machines, (P.), B., 624*.
 Herbig, W., and Seyferth, H., behaviour of textile fibres towards colloidal solutions [of soap, Turkey-red oil, etc.], B., 312.
 Herboth, L., influence of sodium hydroxide on the adsorption of arsenious acid by "saccharated" iron, A., 463.
 Herbst, H., physical properties of active charcoals, and the heat effect of wetting active charcoals with liquids, A., 572.
 vapour-pressure curve and molecular heat of vaporisation of liquid carbon, A., 670.
 apparatus for production of gases, A., 1021.
 volatility of organic compounds, A., 1087.
 cracking solid paraffins with formation of low-boiling products, using activated carbon, B., 261.
 adsorption of asphalt from mineral oils or residues by hydrosilicate earths, B., 523.
 cracking of tars and mineral oils at atmospheric pressure without addition of hydrogen, compared with the Bergius process, B., 907.
 Herbst, K. T., preparation of pure 1-phenyl-2:3-dimethyl-5-pyrazolone, (P.), B., 108.
 Herbst, P. V. A. A., tube and ball mills, (P.), B., 615.
 Hercules Powder Co., Kaiser, H. E., and Hancock, R. S., high-grade wood resin, (P.), B., 988.
 Héreng, A. J. A., distillation of fuel, (P.), B., 38.
 Hereward, H. W. See Thomas, J.
 Hereward, R. M. See Ehrrhardt, E. F.
 Hergloz, E., iodine content of the thyroid, A., 1052.
 Heringa, J. See Neckar Waterreiniger Maatschappij.
 Hérissey, H., asperuloside in plants; extraction of the glucoside from *Galium aparine*, L., A., 617, 932*.
 Hérissey, H., and Cheymol, J., sugars obtained from gein, A., 285.
 Herlinger, H. V. See Beete, M. C.
 Herman, R. S., varying characteristics of three types of wheat grown under the influence of identical environment, B., 1026.
 Hermann, A. See Chemische Fabrik Griesheim-Elektron.
 Hermann, E. C. See Haslam, R. T.
 Hermann, O., and Thermo Electric Battery Co., thermoelectric element, (P.), B., 371.
 Hermans, P. H., cetyl xanthate, A., 819.
 Hermans, P. H. See also Böeseken, J., and Gelissen, H.
 Heringhaus, H., and Wintrop Chemical Co., sulphonated thiophenols useful as pharmaceutical compounds, (P.), B., 851.
 Herenstein, lipid content of the corpus luteum, A., 316.
 Heron, H., oxygen as a factor in the production of sound beer, B., 603.
 Herren, W. T. See Otis, S.
 Herrera, L. A., imitations of cell-division and spore-germination with calcium fluorosilicate, A., 244.
 simulation of living creatures, A., 435.
 Herrily, C. J., and Carbide & Carbon Chemicals Corporation, process of making crotonaldehyde, (P.), B., 610.
 process of making aldols, (P.), B., 995.
 Hermann, E., flocculating power of organic anions, A., 1204.
 Hermann, F., filtering liquids [mineral oils, etc., with the aid of silicic acid], (P.), B., 6*.
 Herrmann, K., Hosenfeld, M., and Schönfeldt, N., lattice structure of calcium chromate, A., 996.
 Herrmann, L. See Lottermoser, A.
 Herrmann, P., testing the rust-protective power of paints, B., 167.
 Herrmann, W. See Müller, W. J.
 Herrmann, W. O., Deutsch, H., and Consortium für Elektrochem. Ind. G.m.b.H., refining aldehyde resins, (P.), B., 838*.
 process of resinifying aliphatic aldehydes, (P.), B., 1021*.
 Herrmann, W. O. See also Consortium für Elektrochem. Ind. G.m.b.H.
 Herrmuth, E. See Chem. Fabr. Kalk.
 Herron, J. H., Co. See Weidenthal, H. G.
 Herschel, W. H., and Bulkley, R., consistency measurements of solutions of rubber in benzene, A., 1003.
 Hersey, S. See Kirkham, Hulett, & Chandler, Ltd.
 Hershey, R. L. See Clark, G. L., and Weber, H. C.
 Hertel, O. H., distillation of carbonaceous material, (P.), B., 350.
 carbonising apparatus, (P.), B., 429.
 Herthel, E. C., Isom, E. W., and Sinclair Refining Co., cracking hydrocarbons, (P.), B., 908.
 Herthel, E. C., and Sinclair Refining Co., cracking of [hydrocarbon] oils, (P.), B., 911.
 Herthel, E. C. See also Sinclair Refining Co.
 Hertrich, M. See Heinrichs, H.
 Hertwig, R., and Bailey, L. H., determination of unsaponifiable matter in flour, alimentary pastes, and eggs, B., 338.
 Herly, C. H., jun., chemical equilibrium of manganese, carbon, and phosphorus in the basic open-hearth process, B., 490.
 Herly, C. H., jun., and True, O. S., reaction between manganese and iron sulphide, A., 488.
 Hertz, G., excitation of spectrum lines by collisions of electrons, A., 331.
 Herynk. See Vavon, G.
 Herz, E. von, detonator [priming composition], (P.), B., 966.
 Herz, R., Brunner, W., and Grasselli Dyestuff Corporation, violet vat dyestuffs of the 2-thionaphthen-2-indoleuidigo series, (P.), B., 816.
 Herz, R., and Grasselli Dyestuff Corporation, quinone vat dyestuff, dyeing particularly animal fibres in the vat fast shades, (P.), B., 736.
 Herz, W., molecular volume and molecular refraction of mixtures of liquids, A., 110.
 densities at the absolute zero and the total expansion of the liquid state of organic compounds, A., 117.
 limits of validity of gas equations, II., A., 342.
 connexion between the properties of normal liquids, A., 462.
 coefficients of expansion at equal reduced densities, A., 463.
 volume contraction in the formation of aliphatic compounds at the absolute zero, A., 559.
 temperatures of equal surface tensions, A., 568.
 internal pressure and free space, A., 670.
 volume contraction in the formation of aromatic compounds at the absolute zero, A., 778.
 relation between the volume [of a substance] at absolute zero and other properties, A., 786.
 internal pressure and coefficient of expansion, A., 1000.
 heat of vaporisation and surface tension, A., 1008.
 coefficient of expansion and free space, A., 1088.
 Herz, Wilhelm, electrostatic separation of ores, (P.), B., 18.
 Herzberg, W. See L. G. Farbenind. A.-G.
 Herzen, E., quanta and chemistry, A., 657.
 Herzenberg, J., and Ruhemann, S., blue oil of lignite tar, B., 42.
 Herzfeld, E., and Engel, W., lipases of the internal secretory organs resistant to quinine and atoxyl, A., 94.
 Herzfeld, F., oxidation products of lactose and maltose on treatment with "Peeling" solution, B., 560.
 determination of reducing sugars by the picric acid method, B., 642.
 Herzfeld, K. F., reactions between a dissolved substance and contiguous colloidal particles, A., 677.
 Herzfeld, K. F., and Hettich, A., symmetry of sylvine and the nature of the etching figures, A., 889.
 Herzfeld, K. F., and Wolf, K. L., molecular refractivity of some simple salts, A., 11.
 Herzner, R., and Mann, O., detection of incipient putrefaction in meat, B., 1027.
 Herzog, B., pre-melting pig-iron for use in the scrap-pig iron process in Siemens-Martin furnaces, B., 410.
 Herzog, O., making emulsions using emulsifiers derived from wool fat, (P.), B., 136*.
 obtaining sulphonated products of wool fat, (P.), B., 287*.
 Herzog, R. O., application of Röntgenspectrography to the study of colloidal systems, A., 122.
 X-ray comparison between lichenin and cellulose, A., 563.
 X-ray investigations of highly polymerised organic substances to determine the limiting values of their mol. wts., A., 665.
 structure of cellulose and its significance in chemical transformations, A., 677.
 X-ray investigations on cellulose, A., 781.
 crystal structure of cellulose acetate and nitrate, A., 782.
 swelling of cellulose, A., 793.
 colloidal characters of cellulose, A., 902.
 advances in the knowledge of fibres, B., 355.
 ripening of viscose, B., 660.
 Herzog, R. O., Gaebel, R., and Jancke, W., viscose solutions, A., 902.
 Herzog, R. O., and Gonell, H. W., weighting of silk, B., 357.
 Herzog, R. O., and Krüger, D., diffusion researches on solutions of cellulose in copper ammonia solution, A., 903.
 Herzog, R. O., and Lasik, G., infra-red absorption spectra of cellulose in the region of the dispersion of fluorite, A., 677.
 Herzog, W., gravimetric determination of benzidine and its analogues and new complex salts of these bases, A., 1050.
 utilisation of by-products of saccharin manufacture in the production of synthetic tannins and in tanning, B., 599.
 [saccharin chemistry], B., 607.
 isolation and properties of by-product in saccharin manufacture, B., 993.
 Heskett, W. P., and Molesworth, H. B., self-disintegrating metallic compounds for use in anti-fouling paints, (P.), B., 680.
 Hess, A. F., Weinstock, M., and Sherman, F., antirachitic value of irradiated cholesterol and phytosterol. IV. Factors influencing biological activity, A., 207.
 antirachitic value of irradiated cholesterol and phytosterol. V. Chemical and biological changes, A., 546.
 antirachitic value of irradiated cholesterol. II. Separation into active and inactive fractions, A., 1182.
 Hess, F. M., continuous distillation, (P.), B., 176.
 Hess, H. See Doppelstein, O., and Freudenberg, K.
 Hess, K., cellulose. XX., A., 1127.

Hess, K., and Schultze, G., cellulose. XIX. Cryoscopic behaviour of crystalline cellulose acetates, A., 715.

Hess, K. See also Katz, J. R., and Micheal, F.

Hess, V. F., origin of high altitude radiation, A., 450.

Hess, V. F., Leman, E. D., and United States Radium Corporation, purification of radium emanation, (P.), B., 274.

Hesse, L., and Rathert, H., manufacturing threads of artificial silk of highest degree of fineness from viscose, (P.), B., 316*.

Hesse, W. See Tammann, G.

Hessel, G., fate of cadmium after parenteral administration, A., 1274.

Hessel, W. See Körber, F.

Hessen, R. See Bakelite Ges.m.b.H.

Hessenbrück, W. See Oberholzer, P.

Hetényi, S., Holló, J., and Weisz, S., specific action of carbonic acid on the respiratory centre in man and rabbits, A., 84.

Hetherington, H. C. See Pinck, J. A.

Heterschij, C. W. G., and Hudig, J., determination of hydrogen-ion concentration in liquids and suspensions; application of Biilmann's quinhydrone method, A., 139.

Hettich, A. See Herzfeld, K. F.

Hettner, G., theory of photophoresis, A., 1013.

Hetzl, K. S., and Long, C. N. H., metabolism of the diabetic individual during and after muscular exercise, A., 425.

Hetzer, J. See Dimroth, O.

Heubner, W., and Meyer-Bisch, R., sulphate content of blood-serum and of aqueous humour, A., 1167.

Heukelekian, H., and Waksman, S. A., carbon and nitrogen transformations in the decomposition of cellulose by filamentous fungi, B., 101.

Heukelekian, H. See also Rudolfs, W.

Heuland, S., production of metals [iron, chromium, and manganese] and their alloys [from ores], (P.), B., 673.

Heuse, E., deoxidising metals not affected by carbon, (P.), B., 197.

Heuse, W., gas thermometry with helium, neon, nitrogen, and oxygen, A., 786.

Heuser, E., [In]crustations of plants. VI. I., A., 548.

Heuser, E., preparation of protocatechuic acid, (P.), B., 772.

Heuser, E., and Hieber, N., depolymerisation of cellulose, A., 602.

Heuser, E., and Schuster, M., scientific foundations of the viscose process, B., 339.

Heuser, R. V., and American Cyanamid Co., preparing cyanogen chloride, (P.), B., 708.

Heuser, R. V. H., and Burrage, A. C., vulcanisation of rubber, (P.), B., 989.

Heusler, F., and Isabellenhütte Ges.m.b.H., brass alloy, (P.), B., 676.

silver alloy, (P.), B., 676*.

Heusler, O., equilibria in the reduction of chromium sesquioxide and of uranium dioxide with carbon, and in the action of nitrogen on uranium carbide, A., 909.

Heuss, W. See Karrer, P.

Heuze, C., manufacture of plate glass, etc., (P.), B., 1015*.

Hevea Corporation. See Loomis, C. C.

Hevesy, G. von, regularity in the rare earths, A., 111.

electrical conductivity in single crystals and in crystal aggregates, A., 667.

Hevesy, G. von, and Lödström, M., acetylacetone of zirconium and hafnium, A., 1125.

Hevesy, G. von. See also Coster, D., and N. V. Philips Gloeilampenfabr.

Hevitt, A. E. See Bourne, W.

Hevitt, H., and British Arkady Co., Ltd., manufacture of bread, (P.), B., 689*.

Hevitt, J. A. See Reeves, H. G.

Hevitt, L. C., fusion points of firebrick-coal ash mixtures, B., 917.

Hevitt, L. F., and King, H., trypanocidal action and chemical constitution. IV. Arylamides of aminoxydorophenylarsinic acids, A., 746.

Hevitt, L. F., King, H., and Murch, W. O., trypanocidal action and chemical constitution. V. Arylsulphonamides of some phenylarsinic acids, A., 851.

Hey, D. H. See Butler, J. A. V.

Hey, H., recovery of lead and silver from sulphide ores and metallurgical products, (P.), B., 330.

Hey, K. See König, W.

Heyden, H. von der, and Typke, K., purifying used [transformer and switch] oils with fuller's earth, I., 198.

examination of some transformer oils after long exposure to light, B., 860.

Heyer, W., development of sulphuric acid manufacture from gases obtained by roasting lead ores, B., 190.

Heyerdal, F. F., and Aktieselskabet Thunes Mek. Vaerksted, manufacture of cellulose from resinous wood, (P.), B., 738.

Heyl, F. W. See Fullerton, B., and Hart, M. C.

Heyl, G. E., maintaining solid [coal] particles uniformly suspended in liquids, more especially liquid fuels, (P.), B., 431*.

process for making cement from town and like refuse, (P.), B., 597, 981.

cement and lime-burning, (P.), B., 668.

transport and distillation of mineral oils, tar oils, and tars, (P.), B., 699.

cracking of [petroleum] oils, (P.), B., 1005.

wall coverings, (P.), B., 1016.

production of ash or clinkers from town and like refuse, (P.), B., 1016.

Heyman, W. A. See McComb, W.

Heymann, E., dialysis and ultrafiltration, electrodialysis, and electroultrafiltration, A., 31, 120*.

Heymann, E. See also Bechhold, H.

Heyn, M. See also Hofmann, F.

Heyne, G. See Agte, K.

Hoyrovský, J., occurrence of divi-manganese (atomic number 75) in manganese salts, A., 138.

analysis with the aid of the dropping mercury cathode, A., 590.

significance of electrode potential, A., 687.

Hoyrovský, J., and Souček, B., electrolytic potential of iron amalgam, A., 910.

Hoyrovský, J. See also Dolejšek, V.

Hibbard, P. L., chromic acid method for the determination of small amounts of bromine, A., 260.

rapid method for demonstrating the effects of plants on a culture solution, A., 547.

iodometric determination of the halogens, A., 928.

Hibbard, P. L. See also Hoagland, D. R.

Hibbard, R. P. See Doby, G.

Hibert, E. See Knecht, E.

Hiekethier, C. F., corrosion of iron water mains, B., 806.

Hickey, E. G., recovering tin [from tinned iron], (P.), B., 756.

Hickinbottom, W. J. See Morgan, G. T.

Hicks, C. S., tautomerism in the thyroxin molecule, A., 621.

Hicks, H. C., and Mitchell, A. C. G., specific heat and entropy of hydrogen chloride derived from infra-red band spectra, A., 734.

Hicks, J. S. See Rising, M. M.

Hicks, W. M., analysis of the copper spectrum, A., 766.

structure of the spectra of the rare gases, A., 1186.

Hickson, J. R. See Carrington, J. H.

Hidaka, T., mistake in the acid value of crude oils and fats, and use of the "impure acid value," B., 199.

Hidner, P., and Sweeney, W. T., thermal expansion of tungsten, A., 231.

Hidner, P. See also Souder, W.

Hieger, I., effect of copper compounds on the growth of carcinoma in the rat, A., 636.

Hiemer, N. See Heuser, E.

Hiers, G. S., and Adams, R., reduction of phenyl-*o*-acetyl-*p*-propanoic acid and various aromatic amines by hydrogen in the presence of platinum oxide-platinum-black as catalyst, XII. A., 402.

synthesis of homologues of dihydrochaulmoecic and dihydrohdydnoecic acids containing a cyclohexyl in place of a cyclopentyl group, III. A., 697.

ω -cyclohexyl derivatives of normal aliphatic acids, IV. A., 1130.

Higginbotham (Miss) L. See Fargher, R. G.

Higgins, E. B., treatment of natural base exchanging zeolite-like materials, (P.), B., 174.

processes involving exchange reactions, particularly softening of water by zeolite-like bodies, (P.), B., 422.

azo-dyes and intermediates, (P.), B., 910*.

Higgins, E. B., and O'Callaghan, J. P., preparation and comparative performance of base-exchange water-softening materials, B., 389.

Higgins, E. B., and United Water Softeners, Ltd., treating [base-exchanging] minerals, (P.), B., 614*.

Higgins, J. A. See Nielsen, C.

Higgins, R. See Andrew, J. H.

Higgins, W. F., effect of acetone as an impurity in spirit thermometers, B., 855.

Higgins, W. F. See also Dixon, H. B.

Highbarger, J. H. See McLaughlin, G. D.

Higfield, A., colloidal properties of nitrocellulose sols in mixed solvents, B., 188, 579*.

Hilarovicz, H. See Mozolowski, V.

Hilbert, H., increasing the amount and phosphoric acid content of slag from the Thomas process, (P.), B., 162.

increasing the amount and phosphoric acid content of basic slag, (P.), B., 833.

Hildebrand, J. H., factors determining chemical stability, A., 362.

energy of combination of gaseous ions, A., 1189.

Hildebrand, J. H. See also Morgen, R. d.

Hildebrand, F., pentamethylenetetrazole (cardiazol), I., A., 1057.

photographic developer for development in bright light, (P.), B., 300.

Hildebrand, F. See also Eichler, O.

Hildebrand, F. M., laboratory pure culture apparatus, A., 142.

Hildebrand, H., comminuting and mixing substances of all kinds, (P.), B., 727.

Hilditch, T. P., isomerism of the dihydroxystearic acids produced by oxidation of acids of the oleic and elaidic series, A., 938.

Hilgendorff, G., utilization of disinfectants containing mercury in disinfecting baths [for seeds], B., 379.

Hilgenstock, O., vacuum or steam distillation of benzol [wash-oil], B., 809.

Hilger, J. See Fischer, Hans.

Hill, A. E., and Davis, T. W., compound of *o*- and *p*-cresols, A., 1134.

Hill, A. E., and Malisoff, W. M., mutual solubility of liquids, III. Mutual solubility of phenol and water, IV. Mutual solubility of *n*-butyl alcohol and water, A., 571.

Hill, A. E., and Miller, F. W., ternary systems, III. Silver perchlorate, toluene, and water, A., 26.

Hill, A. J., and Keach, D. T., ether-substituted derivatives of ethyl malonate and barbituric acid, A., 271.

Hill, A. J., and Rabinowitz, I., amidines of the holocaine type, A., 516.

Hill, A. J. See also Keach, D. T.

Hill, B. P., and Blaydon Manure and Alkali Co. (1877), Ltd., production of barium oxide and/or hydroxide, (P.), B., 1013.

Hill, C. A., determination of small quantities of bismuth in urine, A., 984.

Hill, C. B., Givens, M. H., and Northwestern Yeast Co., manufacturing yeast from malted milk, (P.), B., 719.

Hill, C. E. See Lloyd, H. D.

Hill, E. See Blatherwick, N. R.

Hill, E. A., crystal angles measured under a microscope, A., 458.

Hill, E. L. See Marvel, C. S.

Hill, (Miss) E. S., reduction of ethyl dibenzylacetone, A., 835.

Hill, H. H., decomposition of organic matter in soil, B., 840.

Hill, J. See Badley, J., and British Dyestuffs Corporation, Ltd.

Hill, J. B., galvanising and similarly coating metals, (P.), B., 590.

Hill, J. B., and Ferris, S. W., relation between boiling point and some other properties of petroleum products, B., 84.

Hill, J. H. See Metropolitan-Vickers Electrical Co., Ltd.

Hill, T. A., and Taylor Laboratories, Inc., [electrolytic] manufacture of cellulose, (P.), B., 945.

Hill, T. A. See also Taylor, E.

Hill, T. C. See Haas, P.

Hille, J. W. See Recordon, C. E.

Hillebrand, H., continuous water-gas production, (P.), B., 309.

Hiller, A., effect of histamine on the acid-base balance; effect of histamine on protein catabolism, A., 974.

Hiller, A. See Van Slyke, D. D.

Hiller, S., manufacture of meal for fertilising and other purposes, and for recovery of oil from fish or vegetable refuse and the like, (P.), B., 807*.

Hiller, S., and Hiller, S., Inc., revivifying spent [sugar] filtering materials, (P.), B., 1026.

Hiller, S., Inc. See Hiller, S.

Hillmer, A., solubility of lignin in phenols, B., 46.

Hillyer, H. W., and National Aniline & Chemical Co., production and isolation of alkali salts of aromatic sulphonic acids, (P.), B., 122.

Hilmer, H. See Fischer, Hans.

Hilpert, C. S., bactericidal properties of the quinone group, A., 321.

new class of disinfectants: chlorinated sulphonlic acids of high molecular weight [from sulphite-cellulose waste lye], B., 222.

Hilpert, S., utilisation of sulphite-cellulose waste liquors, B., 356.
 Hilpert, S., and Schluemperger, E., processes in chrome tanning, B., 639, 891.
 Himmelbach Gebrüder A.-G., impregnating wood, (P.), B., 363, 669.
 Himmelbauer, A., andesine from Trifal, Yugoslavia, A., 266.
 Himmerich, F., determination of nitrogen by Acid's method, A., 38.
 Hinwich, H. E., and Castle, W. B., respiratory quotient of resting muscles, A., 639.
 Hinchley, J. W., Ure, S. G. M., and Clarke, B. W., filtration, B., 175.
 Hinchley, J. W. See also Garland, C. S.
 Hind, H. L., and Pickard, J. A., stream-line filter and its applications to brewing and bottling, B., 380.
 Hind, H. L., Threadgold, H., and Arnold, C. W. B., diastatic power of malt and barley, B., 170.
 Hindhae, M., biological value of bread protein, A., 762.
 Hindmarsh, E. M., variations in the urease content of different varieties of soya bean, A., 1282.
 Hindshaw, H. H., and Hindshaw Engineering & Development Co., utilising low-grade iron ore, (P.), B., 710.
 Hindshaw Engineering & Development Co. See Hindshaw, H. H.
 Hines, H. J. G., Katz, L. N., and Long, C. N. H., lactic acid in mammalian cardiac muscle, II. Rigor mortis maximum and the normal glycogen content, A., 80.
 Hines, H. M. See Boyd, J. D.
 Hinkel, L. E., and Mädel, W. R., condensation of 3-bromo- and 3-nitro-1-dimethylaminobenzaldehyde with ethyl acetoacetate and ammonia, A., 413.
 Hinman, J. J., jun., importance of differentiating colon-aerogenous group in examining water, B., 78.
 Hinrichs, C. G., treating crude oil or petroleum; treating petroleum, (P.), B., 120.
 Hinshaw, W. R. See Titus, R. W.
 Hinshelwood, C. N., and Burk, R. E., relation of homogeneous to catalysed reactions; catalytic decomposition of hydrogen iodide on the surface of platinum, A., 133.
 Hinshelwood, C. N., and Green, T. E., interaction of nitric oxide and hydrogen and the molecular statistics of termolecular gaseous reactions, A., 579.
 Hinshelwood, C. N., and Hutchison, W. K., thermal decomposition of acetone in the gaseous state, A., 691.
 comparison between unimolecular and bimolecular gaseous reactions; thermal decomposition of gaseous acetaldehyde, A., 804.
 Hinshelwood, C. N. Se also Green, T. E., Hutchison, W. K., and Macdonald, J. Y.
 Hintzemann, U., and Joachimoglu, G., keeping properties of aqueous digitalis extract, B., 607.
 Hintzemann, U., Joachimoglu, G., and Ohle, H., chemistry and pharmacology of a new benzyl compound (betolin), A., 238.
 Hippel, A. von, cathodic sputtering, A., 1013.
 Hippenstein, C. L., new mechanical test for rubber insulation, B., 452.
 Hirai, M., melting-curves of the systems hydrogen chloride-ethyl ether and hydrogen chloride-acetone, A., 908.
 Hirao, N., terpenes and sesquiterpenes of Mitsuba-zeri, A., 408, 841.
 terpenes and related compounds. I. Rapid method of isomerising safrole, A., 1135.
 Hirobe, H., thermochemical studies, A., 910.
 Hirose, M., wild duck oil, B., 592.
 artificial beef tallow. II. Relation between properties of the soap and the degree of hydrogenation of the oils used, B., 887.
 Hirsch, B. See Ruff, O.
 Hirsch, P., new method of conductometric analysis, A., 700.
 Hirsch, P., and Rüter, R., reduction-oxidation potentials. I. Determination of very small quantities of ferrous and ferric salt; applicability of reduction-oxidation potentials to analytical operations, A., 930.
 Hirschberg, Z. von. See Deutsche-Englische Quarzsämelmess G.m.b.H.
 Hirschel, W., manufacture of barium sulphide, B., 978.
 Hirschfelder, A. D., and Serles, E. R., antagonistic action of magnesium and calcium salts and mode of action of some analgesic drugs, A., 1274.
 Hirsch-Kauffmann, H. See Embden, G.
 Hirsch, Kupler- & Messingwerke A.-G. See Campbell, D. F.
 Hirsch, J. M., motor fuel and process for producing same, (P.), B., 1006.
 Hirst, C. T. See Greaves, J. E.
 Hirst, E. L., structure of normal monosaccharides. IV. Glucose, A., 385.
 Hirst, E. L., and Macbeth, A. K., structure of normal monosaccharides. III. Rhamnose, A., 273.
 Hirst, E. L. See also Haworth, W. N.
 Hirst, H. R., proposed system of tests for the fastness of dyestuffs on wool, B., 43.
 Hirst, H. R., and King, A. T., determination of alkali with special application to wool, B., 266.
 determination of sulphuric acid in wool, B., 266.
 Hirst, H. R. See also Barker, S. G.
 Hirst, H. S., influence of an illuminated mercury surface on the Franck-Carlo reactions, A., 583.
 Hirst, H. S., and Rideal, E. K., thermal decomposition of nitrogen pentoxide at low pressures, A., 32.
 surface catalysis in photochemical processes, A., 34.
 function of radiation in unimolecular reactions, A., 584.
 Hirst, H. S. See also Rideal, E. K.
 Hirst, J. F. See Bowles, T. H.
 Hirt, L. E., distilling oil, (P.), B., 40, 1006*.
 Hiscocks, E. S. See Butler, J. A. V.
 Hislop, G. R., gas retort settings, (P.), B., 731*.
 Hissink, D. J., titration curves for humic soils, B., 553.
 Hissink, D. J., and Spek, J. van der, determination of the p_{H_2} of soils by means of Billmann's quinhydrone electrode, B., 558.
 Hissink, J. J., recovery of nickel from ores, (P.), B., 675.
 Hitchcock, D. I., effect of p_{H_2} on the permeability of collodion membranes coated with protein, A., 1100.
 Hitchcock, H. K., making sheet glass, (P.), B., 128.
 Hitchen, H., self-acting apparatus for mechanical separation of liquid mixtures, (P.), B., 776*.
 Hite, C. E., slaked lime, (P.), B., 684.
 Hitchmann, R., process for removing acids from leather, especially from chrome leather, (P.), B., 206.
 Hixon, R. M., laboratory mixing machine for solids, B., 303.
 Hixon, R. M. See also Allison, J. B.
 Hjort, A. M., influence of calcium salts on serum calcium of normal and thyro-parathyroidectomised dogs, A., 86.
 Hjort, A. M., Grubitz, O. M., and Flieger, A. G., parathyroid glands and their iodine content, A., 1167.
 Hjort, J., extracting fat from bones, (P.), B., 372.
 Hlasko, M., and Kadenacowna, M., solubility of iodine in aqueous hydrogen iodide and the electrolytic dissociation of hydrogen tri-iodide, A., 897.
 Hoagland, D. R., Hibbard, P. L., and Davis, A. R., influence of light, temperature, and other conditions on the ability of *Nitella* cells to concentrate halogens in the cell sap, A., 1179.
 Hoagland, R., and Lee, A. R., vitamin-A in poultry flesh and fat, B., 846.
 Hoagland, R., and Powick, W. C., chemical study of the flesh of emaciated cattle, B., 846.
 Hoagland, R., and Snider, G. G., vitamin-A in beef, pork, and lamb, A., 206.
 nutritive value of oleo oil and oleo stearin, B., 509.
 nutritive value of protein in voluntary muscle, heart, liver, and kidney, from cattle, sheep, and hogs, B., 846.
 nutritive value of protein in veal and calf sweetbreads; in beef cheek meat, lips, tongues, brains, spleen, and tripe; and in hogs' brains and tongues, B., 846.
 Hobson, R. R. See Moore, H.
 Hocart, R., active hydrogen and catalytic hydrogenation at a distance, A., 482.
 Hochheim, E., and Knebel, E., exposure tests with the Osram Pointolite lamp, B., 437.
 Hochmuth, O. See Altgelt, H.
 Hochmuth, F. See Franck, H. H.
 Hochwalt, C. A., and General Motors Corporation, producing dialkyl selenides and tellurides, (P.), B., 513.
 Hock, A., electrometric measurement of the hydrogen-ion concentration with the aid of the quinhydrone electrode and a new apparatus therefor, A., 701.
 scale for direct reading of p_{H_2} values [from millivoltmeter readings], A., 706.
 Hock, A. See also Niklas, H.
 Hock, A. L. See Bennett, G. M.
 Hock, H., and Klawitter, F., behaviour of lead anodes in the electrolysis of zinc sulphate solutions, B., 17.
 Hock, H. See also Gelsenkirchener Bergwerk-A.-G., Abt. Schalke.
 Hock, L., analysis of golden sulphide of antimony, B., 200.
 facette-like product obtained by the action of the silent discharge on oil ("Voltofactive"), B., 503.
 Hock, L. and Bostrom, S., thermodynamics of the Joule effect in raw rubber, B., 716.
 Hock, L. and Siedler, P., Joule effect with synthetic rubber, B., 597.
 Hodge, T. P. See Lindemann, L. J. J.
 Hodges, F. W., reaction between picryl chloride and pyridine in alcoholic solution, A., 1107.
 Hodgson, H. H., action of sulphur on the monocloroanilines; mechanism of aromatic thionation and structure of sulphide dyes, A., 511.
 diphenyl series. II. Nitration of diphenylbenzidine, A., 1133.
 use of *m*-chlorophenol for the preparation of intermediates and the positional influence of methylthio-, methoxy-, and chlorine on the colours of certain azo-dyestuffs, B., 626*.
 Hodgson, H. H., and Beard, H. G., chloro-derivatives of *m*-hydroxybenzaldehyde, A., 292.
p-nitrophenylhydrazine, its preparation and gravimetric utility, A., 394.
 nitration of chlorinated 3-hydroxybenzaldehydes and some consequences of adjacent substitution, A., 1039.
 mechanism of formation of *o*- and *m*-hydroxybenzaldehydes from the nitration product of benzaldehyde, B., 511.
 Hodgson, H. H., and Gorowara, F. C., diphenyl series. I. Isomeric 4 : 4'-dichloro-3 : 3' (2 : 3')- and 3 : 5'-dinitro diphenyls, A., 945.
 Hodgson, H. H., and Handley, F. W., colour and constitution. I. Influence of the methylthiol group, alone and in conjunction with the methoxyl group, A., 515.
 Hodgson, H. H., and Kilner, E., preparation of 1-halogeno-2-nitronaphthalenes and 2-uitronaphthalene, A., 279.
 Hodgson, H. H., and Moore, F. H., nitration of *m*-bromophenol, A., 281.
 nitration of phenols. III. Nitration of 4-halogeno-*o*- and *m*-cresols and oxidation of the 4-halogeno-2 : 5-toluquinones, A., 1034.
 Hodgson, H. H., and Wignall, J. S., 3 : 5-dihalogenophenols, A., 1034.
 Hodgson, H. H. See also British Dyestuffs Corp., Ltd.
 Hodina, B. See Hac, R.
 Hodkin, F. W. See Firth, E. M.
 Hodler, A. See Magnus, A.
 Hodson, H. J. See Cobb, J. W.
 Höber, R., and Schürmeyer, A., enzyme action and ion antagonism, A., 322.
 Hoeftake, (Miss) J. M. A., and Scheffler, F. E. C., vapour pressure of phosphoric oxide, A., 342.
 Högåns-Billesholms Aktiebolag, furnace for the production of iron sponge, (P.), B., 368.
 Hoech, W., filtering apparatus, (P.), B., 112.
 Höjendahl, R., dipole moment and molecular structure, A., 779.
 Hoek, C. P. van, barium sulphate [heavy spar and blanckfle], B., 287.
 particle size of pigments and its influence on paints and paint films, B., 419.
 titanium white, B., 679.
 Hölkens, M., production of cuprammonium cellulose solutions for spinning artificial silk, (P.), B., 188.
 Hölle, W. See Klegel, A.
 Höltorhoff, E. See Dilthey, W.
 Höltzke, R. See Geilmann, W.
 Höltzing, P. F., yarn-dyeing apparatus, (P.), B., 820*.
 multi-chamber yarn-dyeing apparatus, (P.), B., 820*.
 Höltz, F., organic acids and bases in non-aqueous solutions. I., A., 1206.
 Hönl, M., constitution of *n*-ketogluconic acid, A., 147.
 Hönl, M., and Fuchs, W., tanning materials from sulphite-cellulose waste liquors, (P.), B., 456.
 Hönl, H., intensity problem of spectral lines, A., 550.
 Hoenshel, H. D. See Latimer, W. M.
 Hönts & Co., preservation of wood, (P.), B., 889.
 Höpflner, T., and Jaudas, K., determination of free acid and fat in technical cascine, B., 509.
 Höpflner, T. See Steinkopf, W.
 Höriug, M. See Meisenheimer, J.
 Hörmann, L., Kaufler, F., and Wacker-Ges. für Elektrochem. Ind. G.m.b.H., A., manufacturing acetic anhydride, (P.), B., 692*.
 Horn, A. See Weinland, R.
 Hoet, J. P. See Beat, C. H.
 Hoeve, J. A. van der. See Cohen, E.

Foeven, B. J. C. van der. See Levene, P. A.

Hoyberg, H. M., casein content of Danish milk, B., 212.

Höfer, W., danger of mercury vapour, A., 1223.

Hoff, C. M., and Grasselli Chemical Co., electroplating with metallic cadmium and bath therefore; cadmium-plating, (P.), B., 133.

manufacture of alkali phosphates, (P.), B., 360.

cadmium: its electrodeposition for rust-proofing purposes, B., 951.

Hoff, G. P. See Evans, W. L.

Hoffa, E., and Grasselli Dyestuff Corporation, preparing halogenated oxythiophthalhthene, (P.), B., 703*.

Hoffert, (Miss) D., action of yeast on lactic acid, A., 642.

Hoffert, (Miss) D. See also Maclean, (Mrs.) I. S.

Hoffman, C., Gregor, N. M., Grigsby, H. D., and Fleischmann Co., manufacture of yeast, (P.), B., 337*.

Hoffman, C., and Fleischmann Co., manufacture of leavened bread, (P.), B., 607.

Hoffman, C., Frey, C. N., and Fleischmann Co., preparing yeast for use in food products, (P.), B., 417.

Hoffman, C. T. See Harris, J. A.

Hoffman, F. J. See Grafton, H. T.

Hoffman, H. J., and Du Pont de Nemours & Co., E. I., non-static [photographic] film, (P.), B., 341.

Hoffman, W. F., alcohol-soluble protein from polished rice, A., 441.

Hoffman, W. F. See also Gortner, R. A., and Harris, J. A.

Hoffmann, A. See Jacobs, W. A.

Hoffmann, F., correction for width of slit in measurements with the König-Martens photometer, A., 784.

increase of colour of first-product masscules during boiling, B., 507.

Hoffmann, F. See also Brodbeck, E., and Schmidt, Hans.

Hoffmann, F. G., sodium chloride solution as a confining liquid for gas analysis, B., 146.

Hoffmann, G., Compton effect from γ -rays, A., 551.

scattering effect of γ -rays in water and the origin of the penetrating radiation at the sea, B., 656.

Hoffmann, W. See Müller, Ernst.

Hoffmann-La Roche & Co., F., preparation of bismuth oleate, (P.), B., 77.

preparation of O:O-diacetylidiphenolisinatin, (P.), B., 186.

manufacture of the pure glucoside of *Bulbus scilla*, (P.), B., 851.

manufacture of quinine salts of [hydr]oxyphenylarlsinio acids, (P.), B., 996.

Hofmeister, F. See Bodenstein, M.

Hofmann, A. See Hofmann, K. A.

Hofmann, F., and Dunkel, M., purification of oils, (P.), B., 264.

Hofmann, F., Dunkel, M., Heyn, M., and Grote, W., briquetting of coal dust in stages by pressure, (P.), B., 861.

Hofmann, F., oxidation of metallic iron and the pyrophoric properties of blast-furnace flue-dust, B., 748.

Hofmann, K. A., and Hartmann, F., conditions underlying the attack of hydrochloric acid and ammonium halide on metals, A., 37.

Hofmann, K. A., Hartmann, F., and Hofmann, U., determination of perchlorate in Chilli saltipete based on precipitation with methylene-blue, B., 292.

Hofmann, K. A., Linnemann, W., Galotti, H., Hagenet, H., and Hofmann, A., oxidation of combined nitrogen to potassium nitrate at low temperatures and reduction of potassium nitrate to cyanide, A., 370.

Hofmann, U. See Hofmann, K. A.

Hofmeister, R. See Posner, T.

Hogg, A. R., system sodium sulphide-sodium sulphate-water, A., 684.

Hogness, T. R., and Lnnan, E. G., ionisation of nitrogen by electron impact as interpreted by positive ray analysis, A., 104.

Ionisation of oxygen by electron impact as interpreted by positive ray analysis, A., 768.

Hogstad, A., jun., so-called "Western" (South Dakota) oil of American wormseed; distillation report for 1924; origin, nature, and physiological rôle of the essential oil, B., 565.

Hohmann, A. See Haller, R.

Holben, F. J. See White, J. W.

Holbøll, S. A., determination of sodium thiosulphate in urine with reference to kidney function, A., 753.

carbohydrate metabolism. XI. Influence of various factors on the course of blood glycolysis, A., 1051.

carbohydrate metabolism. XIII. Rate of glycolysis in normal and diabetic blood, A., 1051.

Holbøll, S. A. See also Lundsgaard, C.

Holborn, L., and Otto, J., isotherms of helium, hydrogen, and neon below -200°, A., 1000.

Holbrook, W. F. See Fieldner, A. C.

Holbrook, W. P., and Haskins, H. D., blood uric acid; comparative results by three methods, and technique necessary for accurate determinations, A., 1184.

Holck, H. G. O., seasonal variations in the urinary excretion of total phenols, A., 1269.

Hold, C., combined powdered-fuel and grate furnaces, (P.), B., 305*.

powdered fuel [boiler] furnaces, (P.), B., 426*.

Holdaway, H. H., Pike, L. F., and Flickinger, A. B., briquetting wood particles, (P.), B., 621.

Holde, D., interpretation of the acetyl value and ester transformation of glycerides by acetic anhydride, A., 1123.

determination of hard asphaltum in dark mineral oils, B., 1003.

Holde, D., and Godbole, N. N., saturated acids of highest m. p. from arachis oil [linoleic and hexacosic acids], A., 268, 498.

Holde, D., and Gorgas, A., additive products of iodine bromide and hypoliodous acid with unsaturated compounds, A., 269.

detection of unsaponifiable matter in marine animal oils, B., 98.

significance of liquid-liquid interfacial tension in the qualitative detection of unsaponifiable oils in fats, B., 593.

detection of unsaponifiable oils in fats, B., 836.

additive products of iodine monobromide and hypoliodous acid with unsaturated compounds, B., 836.

distillation of fatty oils in a vacuum, B., 836.

Holde, D., and Schachenmeier, R., lubricating oil for electricity meters, B., 261.

Holden, G. W. See Hatcher, W. H.

Holden, H. F., determination of dextrose in biological material, A., 764.

Holderness, A. See Christie, G. H.

Holford, H. J. See Harvey, P. P.

Holgersson, S., X-ray investigations of the structure of some alloys, A., 459.

Holl, A. See L. G. Farbenind. A.-G.

Holl, C. W. See Evans, W. L.

Holland, A. C., and Cordebar, H., excreta of *Tineola crinella*, A., 1053.

Hollander, C. S., and Rohm & Haas Co., use of hyposulphites or sulphoxylates in the removal of dyes from textile fibres, (P.), B., 914.

Hollard, A., electrolysis of aqueous solutions of hydrogen chloride, A., 366.

Holley, E. See Melchoe, D. H.

Holliday and Co., Ltd., L. B., and Young, A., dyeing cellulose acetate products, (P.), B., 154.

Hollings, W. W., combustibility of coke and direct reduction in the blast furnace, B., 490, 853*.

Hollingshead, T. E., and Otterbacher, T. J., suitability of monel metal for vanilla flavouring containers, B., 848.

Hollins, C. See British Dyestuffs Corp., Ltd.

Hollmann, H. See Auwers, K. von.

Hollmann, H. P., stress-strain curves and physical properties of metal, with particular reference to hardness, B., 921.

Hollnagel, H. P. See also British Thomson-Houston Co., Ltd.

Hollo, J., and Deutscher, D., heterogeneous systems of biological interest. I. Distribution of saline compounds between immiscible solvents, A., 1001.

Hollo, J., and Weiss, S., action of calcium on the acid-base equilibrium in man, A., 85.

Hollo, J. See also Hetényi, S.

Holluta, J., kinetics of carbon dioxide assimilation, A., 1011.

Holly, O. M. See Baumann, E. J.

Holly Sugar Corporation. See Drummond, G. M.

Holman, L. B. See Berlin, A. L., and Leicester, S.

Holmberg, B., stereochemical studies. XI. Reaction distances of anions, A., 384.

stereochemical studies. XIII. 6-Chlorosuccinic acids, A., 937.

stereochemical studies. XII. Carbothionilactic acids, A., 939.

Holmberg, B., and Runius, S., alcoholysis of wood, B., 267.

Holmboe, C. F., electrodes for electrolytic decomposition apparatus, (P.), B., 284, 757.

Holmes, A., rock-lead, ore-lead, and the age of the earth, A., 449.

estimates of geological time, with special reference to thorium minerals and uranium halos, A., 654.

Holmes, A., and Law, R. W., calculation of the ages of radioactive minerals, A., 1075.

Holmes, A., and Lawson, R. W., potassium and the heat of the earth, A., 554.

Holmes, A. D., and Pigott, M. G., vitamin potency of cold pressing cod-liver oils, B., 285.

Holmes, B. B., apparatus for refrigeration, (P.), B., 114.

Holmes, B. E., oxidative mechanisms of tumour tissue. I. Anaerobic habit of tumour tissue, A., 971.

Holmes, B. E. See also Holmes, E. G.

Holmes, E. See Morgan, G. T.

Holmes, E. G., metabolism of salicylic acid, A., 90.

Holmes, E. G., and Holmes, B. E., reducing substances found in alcoholic extracts of brain, A., 857.

Holmes, E. L., and Ingold, C. K., alternating effect in carbon chains. IV. Abnormal reactions as evidence of the incipient ionisation of certain hydrogen atoms in hydrocarbon radicals, A., 829.

alternating effect in carbon chains. VI. Relative directive efficiencies of oxygen and fluorine in aromatic substitution, A., 881.

Holmes, E. L., Ingold, C. K., and Ingold, E. R., alternating effect in carbon chains. VII. Relative directive efficiencies of oxygen and sulphur in aromatic substitution, A., 917.

Holmes, E. L. See also Flürscheim, B.

Holmes, H. N., and Dietrich, M. A., adsorption of sulphides by colloidal chromic hydroxide, A., 468.

Holmes, H. N., Sullivan, R. W., and Metcalf, N. W., increasing the internal volume of silica gels by moist heat treatment, B., 438.

Holmes, J., digestion of paper pulp and concentration of the spent lye, (P.), B., 533.

Holmes, M., alleged decomposition of ammonium nitrite solutions by light, A., 920.

action of light on concentrated aqueous ammonium thiocyanate solutions, A., 920.

Holmes, R. C., Manley, F. T., Behimer, O., and Texas Co., process for making gasoline, (P.), B., 623.

Holmes, R. C., Manley, F. T., and Texas Co., apparatus for cracking oils, (P.), B., 527*.

Holmes, R. M., effect of light on the thermo-electric power of selenium, A., 1086.

Holmes & Co., Ltd., W. C. See Cooper, C.

Holmgren, T. A. F., resistance material electrically conductive in a cold state and usable at high temperatures, (P.), B., 98.

Holmyard, E. J., alchemical nomenclature, A., 265.

Arabic text of Avicenna's "Minerals," A., 378.

Holroyd, G. W. F., Chadwick, H., and Mitchell, J. E. H., electrical conductivity of phosphorus pentachloride, A., 15.

Holsoe, M. G. See Ehrenberg, C.

Holschneider, F. See Lecher, H.

Holt, L. E., jun., and Gittleman, I., solubility of tertiary calcium phosphate in cerebrospinal fluid, A., 195.

Holt, L. E., jun. See also Orr, W. J.

Holt, W. E. See Hammick, D. L.

Holten, C., formation of organic acids and retention of chlorides in lobar pneumonia, A., 1271.

Holter, K., and Thune, S., extracting oil, gelatinous water, and solid material from whale blubber, whale flesh, fish products, and similar raw materials, (P.), B., 448.

recovery of oils from the fat-bearing parts of marine animals, (P.), B., 594.

separating oil from solid vegetable substances, (P.), B., 713.

Holthaus, C., influence of the chemical and physical properties of coke on its combustibility, B., 180.

Holton, A. L. See Dempster, Ltd., R. and J.

Holton, E. C., insecticides and fungicides [during the past fifty years], B., 843*.

Holton, E. C., and Sherwin-Williams Co., insecticide-fungicide, (P.), B., 507.

Holton, W. B. See Thompson, A. P.

Holtsmark, J., absorption of sodium vapour, A., 102.

Holven, A. L. See Blowski, A. A.

Holweck, F., critical potential of the K level of neon, A., 104.

critical potentials of K levels of light atoms, A., 552.

recent experiments on soft X-rays, A., 767.

spectrometry of the K-series of light elements; K-discontinuity of fluorine, A., 874.

Holwerda, B. J., colorimetric determination of the acidity of cheese and whey, B., 212.

Holzapfel, A. C., and Holzapfel, M., protective coating or impregnating compositions, (P.), B., 988.

Holzapfel, M. See Holzapfel, A. C.

Holzheuer, H. F., extraction process and apparatus, (P.), B., 718.

Holzschmidt, W. A., relation of molecular heats of non-associated liquids to those of their vapours, A., 232.

relation between chemical constants and critical magnitudes of normal liquids, A., 233.

Holzverkohlungs-Ind. A.-G., manufacture of acetaldehyde from ethyl alcohol, (P.), B., 610.

production of methyl chloride solutions, (P.), B., 610.

seed pickling materials, (P.), B., 960.

Holzverkohlungs-Ind. A.-G., Krause, E., and Roka, K., chlorination of hydrocarbons, (P.), B., 898.

Homberger, A. W., and Jensen, H., condensation of 9-methylacridine with formaldehyde and preparation of acridine-9-carboxylic acid, A., 526.

Home, M., three fundamental frequencies, A., 221.

Home, M. S. See Keys, D. A.

Home & Colonial Investments. See De Vecchio, I.

Homer Laughlin China Co. See Bleininger, A. V.

Homma, R., laws of scattering of canal-rays in their passage through solid bodies, A., 880.

Homolka, B., and Grasselli Dyestuff Corporation, manufacture of diamino-dialkylmethanes, (P.), B., 703.

Honan, E. M., and Waterman, R. E., rapid evaluation of baked japan finishes, B., 955.

Honcamp, F., and Schramm, W., food value of different grades of barley as produced by a modern seed-purification plant, B., 643.

composition and digestibility of barley and its milling offals, B., 643.

Honda, K., A2 line in the equilibrium diagram of the iron-carbon system, B., 194, 672.

nature of the A1 transformation in carbon steels, B., 791.

is the direct change from austenite to troostite possible? B., 826.

comparison of static and dynamic tensile and notched-bar tests, B., 832.

Honda, K., and Endo, H., change of volume of cast iron on solidification and a criticism of the double diagram of the system iron-carbon, A., 897.

Honda, K., Kaya, S., and Masuyama, Y., magnetic properties of single crystals of iron, A., 665.

Honda, K., and Tanaka, T., moduli of elasticity and rigidity and their change caused by magnetisation in different kinds of steel, B., 545.

Honegger, E., corrosion and erosion of steam turbine blading, B., 143.

polarimetric determination of sucrose in sweetened condensed milk, B., 992.

Hones, E. G., tool steel, (P.), B., 96.

Houng, P., determination and importance of surface tension of sucrose solutions, A., 790.

properties of activated charcoal, B., 180.

chemistry of [sugar] refining by "Norit," B., 641.

comparison of adsorption carbons, B., 859.

Houngmann, L., recovering finely divided solid material from solutions or suspensions, (P.), B., 178.

annular furnace with revolving hearth for continuous working, (P.), B., 521.

Houngmann, L. See also Trocknungs-, Verschwendungs-, & Vergasungs-Ges.m.b.H.

Honeyman, W., pent content of flax fibre, B., 187.

constants of flax wax, B., 794.

Hoodless, W. H., decolorising and filtering material, (P.), B., 696.

filtering material, (P.), B., 696.

Hooft, F. van 't. See Kluyver, A. J.

Hoover, H. D. See Ahmann, C. F.

Hoover, M. O. See Fischer, M. H.

Hoon, R. C. See Dunncliff, H. B.

Hooper, A., ripening and preservation of citrus fruits, (P.), B., 766.

Hooper, C. W., and Metz Laboratories, Inc. H. A., morphine solution; analgesic agent, (P.), B., 172.

Hooper, L. D., separation and purification of platinum and other platinum metals from platinumiferous ores and substances, (P.), B., 547.

Hooper, W. J., critical ionisation potentials by positive-ion impact, A., 448.

Hoops, W., and Aluminum Co. of America, electrolytic cell [for production of aluminum], (P.), B., 63.

Hoover Co., woven fabrics for use as air filters, (P.), B., 904.

Hope, E., unsplinterable glass and other vitreous cemented composite bodies, (P.), B., 747.

Hopf, H. See I. G. Farbenind. A.-G.

Hopfield, J. J., capillary valves for gases, A., 707.

series and multiplets in sulphur and chlorine, A., 1186.

Hopfield, J. J., and Diele, G. H., absorption spectrum of the hydrogen molecule, A., 1078.

Hopkins, B. S. See Engle, (Miss) D. G., Harris, J. A., and Lapp, C. J.

Hopkins, D. G. See McBain, J. W.

Hopkins, E. F., and Wann, F. B., effect of p_H on the availability of iron for *Chlorella* sp., A., 204.

Hopkins, M. B., and Standard Development Co., nitration process [for petroleum distillates], (P.), B., 721.

Hopkinson, E., uniformly and intimately mixing materials with rubber latex, (P.), B., 138.

electrical precipitation [of suspended particles from gases], (P.), B., 371.

Hopkinson, E., Rose, R. P., and General Rubber Co., drying coagulable liquids [rubber latex], (P.), B., 555.

production of combinations of rubber and paper, (P.), B., 555.

Hopper, I. V., reactions of semicarbazides, A., 394.

Hopper, T. H., composition and maturity of maize, B., 930.

Hoppert, C. A. See Steenbock, H.

Horacek, L., determination of sucrose by means of the interferometer, B., 961.

Hori, H. See Weimann, P. von.

Hori, T., absorption spectra produced by the explosion of various elements, A., 652.

structure of bromine lines, A., 874.

explosion spectra of mercury, copper, and iron, A., 875.

radioactive and non-radioactive isotopes, A., 879.

method of determining the dispersion of double refraction and the thickness of a crystalline plate (e.g., mica), A., 887.

Hori, S., stencil sheets, (P.), B., 634, 627.

Horiuchi, J., relation between orthobaric densities, A., 1103.

Horiuchi, R., and Uyeda, S., catalytic reactions. I. Oxidation of anethole, A., 292.

Horkheimer, P. See Mannlich, C.

Hörlich, A. D., determination of iron in ferrum reductum, B., 897.

Hornbeck, J. W., photo-electric response of potassium at low temperatures, A., 1073.

Horne, G. H., and International Precipitation Co., apparatus for electrical precipitation of suspended material from gases, (P.), B., 176.

Horning, R. A., elimination of limestone from clays, B., 361.

Hornig, R. See Swoboda, R.

Horsfall, R. S. See British Dyestuffs Corp., Ltd.

Horst, F. W., highly sensitive Congo paper, A., 594.

Horst, J. H., procedure for destruction of the vine louse [*Phylloxera*], (P.), B., 559.

Horstes, H. See Brugsch, T.

Horton, F. See Andrews, (Miss) U., and Davies, (Miss) A. C.

Horvath, A. A., changes in composition of blood of rabbits fed on raw soya beans, A., 861.

ammonia and blood-sugar, A., 1267.

Hosdowich, J. M., and Chromium Products Corporation, plating with chromium, (P.), B., 711.

Hosenfeld, M., and Siemens & Halske A.-G., removing silica from [acid] ore leaches, (P.), B., 369.

Hosenfeld, M. See also Herrmann, K.

Hosking, J. R., and Short, W. F., m. p. apparatus, A., 593.

Hoskins, W., and Economy Fuse & Manufacturing Co., plastic, (P.), B., 14.

Hoskins, W. M., and Bray, W. C., catalytic oxidation of carbon monoxide. II. Adsorption of carbon dioxide, carbon monoxide, and oxygen by the catalysts, manganese dioxide, cupric oxide, and mixtures of these oxides, A., 807.

Hosmer, F. E., recovering gasoline, (P.), B., 674.

Hosoda, T., physiological action of histidine anhydride and of histidylhistidine [methyl] ester, A., 430.

Hotchkiss, H. T., jun. See Bencowitz, I., and Renshaw, R. R.

Houben, J., and Pflankuch, E., action of sulphuric and nitric acids on dichloro- and chloro-methyl ether, A., 268.

camphor and terpenes. III. Transformations in the camphor series, A., 731.

immonactones and salts of unsaturated nitriles, A., 951, 1247.

camphor and terpenes. IV. Additions and transformations in the camphor series; tsborneol-, camphor-, camphol-, and camphorquulone-carboxylic acids, A., 1251.

esters of formiminic and formhydroximic acids, A., 1236.

esters of oximinic and α -hydroxyoximinic acids, A., 1236.

Houdremont, E., Kallen, H., and Thomsen, K., strengthening and recrystallisation of hardened steels, B., 749.

Hongan, O. A. See Ragatz, R. A.

Hough, H. B. See Markowitz, J.

Hough, T., production of thermoplastic compositions for use in the manufacture of moulded articles, (P.), B., 67.

Hough, T., and Tickle & Co., Ltd., J., apparatus for testing the hardness of materials [metals], (P.), B., 711.

Houghton, C. M., and Bowman, S., action of sulphuric acid on cracked spirit, B., 226.

Houldsworth, H. S., sillimanite bricks and kaolin-sillimanite mixtures, B., 239.

Hout. See Travers, A.

House, M. See Taylor, N. M.

Houseman, C. R. See British Oxygen Co., Ltd.

Houston, A. C., chemical and bacteriological examination of London waters for the twelve months ended March 31, 1926, B., 934.

Houston, B., and Johnson, T. B., nitrogen tetroxide as a reagent for diazotisation, A., 164.

Houston, J., the miscometer: an apparatus for obtaining composite samples [of milk], B., 930.

Houston, W. V., hydrogen doublet, A., 549.

origin of spectral doublets, A., 1070.

Houston, R. A., measurement of radiation intensities by photographic methods, A., 263.

theory of the absorption of X-rays, A., 987.

Hove, H. von. See Wieland, H.

Howald, A. M., and Grasselli Chemical Co., wood preservation, (P.), B., 633.

Howard, F. A., fifty years in the petroleum industry, B., 812.

Howard, F. A., Clark, E. M., and Standard Development Co., steam distillation [of hydrocarbon and like liquids, immiscible with water], (P.), B., 814.

Howard, F. A., and Standard Development Co., converting hydrocarbon oils into lower-boiling products, (P.), B., 700.

motor fuel for internal-combustion engines, (P.), B., 700.

Howard, F. A. See also Clark, E. M.

Howard, H., and Grasselli Chemical Co., crystallisation, (P.), B., 31.

continuous crystallising apparatus, (P.), B., 32.

apparatus for absorption of gases in liquids, (P.), B., 114.

electrolytic production of copper carbonate, (P.), B., 126.

sulphur burner, (P.), B., 155.

manufacture of sodium thiosulphate, (P.), B., 237.

insecticide for use on tobacco plants, (P.), B., 559.

chemical analysis apparatus and process [for oleum], (P.), B., 914.

Howard, H. C., jun., mechanism of the catalytic dehydration of methyl alcohol and some properties of the hydrous aluminium oxide catalyst, A., 918.

Howard, J. W., alcohols containing the trichloromethyl group, A., 496.

Howard, R. L. See Sollmann, T.

Howards & Sons, Ltd., and Blagden, J. W., manufacture of hydrogenated cinchona alkaloids, (P.), B., 565.

Howe, G. H. See British Thomson-Houston Co., Ltd.

Howe, J. L., isomeric ruthenium chlorides, A., 926.

Howe, J. L., and Haynes, L. P., ruthenium. VIII. Isomeric chlorides, A., 138.

Howe, J. L., and Mercer, F. N., ruthenium. IX. Solubility of ruthenium in hypochlorite solutions; attempted determination of the metal, A., 138.

Howell, E. V., silica gel as filtering agent, A., 932.

Howell, G. D. See Bircher, J. L.

Howes, R. T. See Black, J. C.

Howland, G. A., electrolyte for electrical batteries, (P.), B., 986.

Howland, J., Marriott, W. McK., and Kramer, B., inorganic composition of bones, A., 969.

Howland, J. See also Kramer, B., and Shipley, P. G.

Howland, L. See Jensen, H.

Hoy, O., filter, (P.), B., 568.

Hoyle, H. P., centrifugal separator, (P.), B., 34.

Hoyois, L., washing coal and ores, (P.), B., 971.
 Hoy, F. C., application of the correspondence principle to relative intensities in series spectra, A., 106.
 Hoy, L. F., and Verwile, A., determination of concentration of liquid soaps by the immersion refractometer, B., 678.
 Hoy, S. L., hardness of cold-rolled copper, B., 791.
 Hoy, S. L., and Schermerhorn, T. R., hardness of cold-rolled copper, B., 325.
 Hrasovec, A. See Kremann, R.
 Hruda, J., influence of the filter-cloth on scum press work [in sugar refining], B., 169.
 Hrynakowski, C., rhythmic crystallisation of potassium alum in the metastable state, A., 897.
 Hrynakowski, C., and Rychter, A., modification of the method of isothermal distillation for the determination of the molecular concentration of blood serum, A., 211.
 Hsu, K., nuclein substances of the pancreas, A., 857.
 Hubacher, M. See Zetsche, F.
 Huber, A., magneto electric orientation effect, A., 1189.
 Huber, F. C., and Reid, E. E., influence of rate of stirring on reaction velocity, B., 519.
 Huber Co., J. M. See Price, H. W.
 Hubert, E. See Farbenfab. vorm. F. Bayer & Co.
 Huber, E. E. See Bateman, E.
 Huhmann, O. See Akt.-Gas. für Brennstoffvergasung.
 Hucker, G. J., and Marquardt, J. C., effect of lactic acid-producing *Streptococci* on the flavour of cheddar cheese, B., 718.
 Huddleston, B. T. See Rose, W. C.
 Hudgill, J. See Hettterschij, C. W. G.
 Hudson, C. S., relations between rotatory power and structure in the sugar group. XIII. Classification of various substances of the mannose and rhamnose series according to ring types. XIV. Determination of ring structures in the dextrose, mannose, and rhamnose series, A., 714.
 relations between rotatory power and structure in the sugar group. XVI. Conversion of cellobiose into another disaccharide, celtriose, by the aluminium chloride reaction; chloroacetylceltriose, A., 941.
 Hudson, C. S., Pringsheim, H., and Leibowitz, J., relations between rotatory power and structure in the sugar group. XI. The related rotations of amylobiose, amylotriose, and glucose, A., 276.
 Hudson, C. S. See also Kunz, A., and Phelps, F. P.
 Hudson (Miss) D. See Platt, J. H.
 Hudson, W. E. See Dean, R. H.
 Hübl, A., desensitisation of colour-sensitive plates, B., 612.
 metoquinone developer, B., 997.
 Huebner, J., finishing and ornamentation of textile materials, (P.), B., 537.
 Huebner, J., and Veukataraman, K., behaviour of different starches towards dyestuffs and iodine. I. and II., B., 430, 1025.
 Hueck, H., blood proteins. II. Action of coagulation-inhibiting salts on plasma and serum, A., 86.
 Hücker, W., configuration changes in substitution reactions, A., 1024.
 Hülsbruch, W., sulphur content of mixed gas in the Siemens-Martin furnace, B., 971.
 Hülsmeier, C., preheating and purifying [deaerating] boiler feed-water, (P.), B., 302.
 Hüncke, H. See Ley, H.
 Huere, R., separation of monohydric phenols and monoethers of dihydric phenols, A., 832.
 testing of cello oil, B., 804.
 Hueter, R. See Riedel, J. D., A.-G.
 Hüttenwerke Tempelhof A. Meyer, furnaces [for separating components of alloys], (P.), B., 754.
 Hüttenwerke Tempelhof A. Meyer. See also Meyer, M.
 Hüttig, G. F., hydrogen. II. Solid metal-hydrogen compounds, A., 254.
 Hüttig, G. F., and Brodkorb, F., hydrogen. IV. Copper hydride, A., 694.
 hydrogen. V. Compounds of hydrogen with calcium, A., 800.
 Hüttig, G. F., and Lürrmann, P., mechanism of the pyrites roasting process, B., 628.
 Hüttig, G. F., and Menzel, E., adsorption of soluble constituents by insoluble precipitates and the formation of mixed crystals, A., 900.
 Hüttig, G. F., and Wehling, H., specific heats of aqueous homogeneous phases, A., 1103.
 Hüttig, G. F. See also Gutbier, A., and Joos, G.
 Huff, J., detection and determination of traces of carbon disulphide in small gas volumes, B., 146.
 Huff, L. C., apparatus for removing solid carbonaceous material from oil-cracking apparatus, (P.), B., 309.
 Huff, W. J., origin of carbon disulphide in the carbonisation of coal, B., 427.
 Huffman, C. F., and Robinson, C. S., composition of ox blood. III. Blood of calves on diet of milk, with or without supplements, A., 968.
 Huffman, C. F. See also Robinson, C. S.
 Hugel, G., heterocyclic compounds containing quinquevalent iodine or bromine, A., 183.
 Hugel, G. L., [manufacture of] diphenylmethane dyestuffs, (P.), B., 149.
 Hugershoff, H., acetyl derivatives of thiocarbamide and carbamide; constitution of thiocarbamide, A., 156.
 Huggett, A. S. G. See Mellanby, J.
 Huggett, J. L. See Seyer, W. F.
 Huggins, M. L., evidence from crystal structures in regard to atomic structures, A., 458.
 Huggins, M. L., and Field, J., adsorption mechanisms, A., 1002.
 Huggins, M. L., and Hendricks, S. B., confirmation of presence of a non-tetrahedral carbon atom in crystals of pentaerythritol, A., 227.
 Hugh, W. E. See Butler, J. A. V.
 Hughes, A. L., and Jauncey, G. E. M., radiation arising from the mutual annihilation of protons and electrons, A., 221.
 Hughes, A. L. See also Jauncey, G. E. M.
 Hughes, E. B. See Lampitt, L. H.
 Hughes, E. M., and Sun Oil Co., making organic-acid soap [cutting oil] from mineral oils, (P.), B., 478.
 Hughes, J. S. See Titus, R. W.
 Hughes, T. P. See Petersen, W. F.
 Hugill, H. R. See Burt-Gerrans, J. T.
 Hugill, W., and Rees, W. J., effect of repeated burning on the structure and properties of lime-bonded silica bricks, B., 916.
 Hugonin, G., report of a committee of the French section of the Society of Leather Trade Chemists on quantitative tannin analysis, B., 464.
 Hugounenq, L., and Loiseleur, J., selective adsorption of colloids, A., 1091.
 biochemistry of electrolytes, A., 1058.
 use of glycogen in the preparation of colloidal metals, B., 384.
 Hugues, E., effect of sun on the ripening of the grape and the composition of the wine, B., 380.
 Hugues, E., thermal treatment of electrolytic iron in a vacuum and recovery of gases, B., 159.
 Hulles, Goudrons & Dérivés, refining liquid hydrocarbons, (P.), B., 733.
 Hulbert, E. O., laboratory mercury lamp, A., 705.
 action of radiation on free electrons, A., 881.
 spectrum of the condensed spark in aqueous solution, A., 1079.
 Hulshruh, W. See Will, E.
 Hulthén, E., and Zumstein, R. V., absorption spectra of some hydride compounds in the ultra-violet, A., 882.
 Hulthén, E. See also Eriksson, G.
 Humboldt, E. S., and Pacific Lumber Co., preparing viscose solutions, (P.), B., 122.
 Humber, S. R., and Perrin, M. W., deposition of metallic zinc on the positive pole of a simple voltaic cell, A., 689.
 Hume, E. M., and Smith, H. H., effect of irradiation of the environment with ultra-violet light on the growth and calcification of rats fed on a diet deficient in fat-soluble vitamins; part played by irradiated sawdust, II., A., 614.
 production by irradiation with ultra-violet light of antirachitic properties in sterols derived from the small Siak illipé nut (*Palauquium Burckii*), A., 644.
 Hume, J., thermoregulator, B., 903.
 Hume, J. See also Chamberlain, N. H.
 Hume, W. R., heat treatment of materials for the extraction of volatile constituents or moisture therefrom, (P.), B., 520.
 Hume, W. R. See also Hume Steel, Ltd.
 Hume-Rothery, W., intermetallic compounds, with special reference to certain compounds of tin. I.—V. [Calcium-tin and magnesium-tin alloys], A., 356, 895.
 Hume-Rothery, W. See also Lambert, B.
 Hume Steel, Ltd., and Hume, W. R., flux materials for use in arc welding and methods of coating electrodes, (P.), B., 984.
 Humpert, K. See Fischer, F.
 Humphrey, C. W. See Lea, H. T.
 Humphrey, G. C. See Hart, E. B.
 Humphrey, G. J., preservation of vitamin-C in dried orange juice, A., 1065.
 Humphrey, G. J. See also McLendon, J. F.
 Humphrey, H. A., and Synthetic Ammonia & Nitrates, Ltd., production of combustible gases, (P.), B., 38.
 production of mixtures of nitrogen and hydrogen for ammonia synthesis, (P.), B., 89.
 Humphrey, H. A. See also Synthetic Ammonia & Nitrates, Ltd.
 Humphreys, R. E., and Standard Oil Co., pressure oil still, (P.), B., 622.
 Humphreys, R. E. See also Standard Oil Co.
 Humphreys, R. W. See Pryde, J.
 Humphreys & Glasgow, Ltd., and Chrisman, C. S., apparatus for manufacture of water-gas, (P.), B., 202.
 production of water-gas, (P.), B., 429.
 Humphreys & Glasgow, Ltd., and Evans, O. B., manufacture of water-gas, (P.), B., 229.
 Humphreys & Glasgow, Ltd., and Fulweller, W. H., purification of gas, (P.), B., 908.
 Humphreys & Glasgow, Ltd., and Glasgow, A. G., mechanically-clinkered gas producers, (P.), B., 624.
 Humphreys & Glasgow, Ltd., and Perry, J. A., generation and distribution of gas, (P.), B., 624.
 Humphreys & Glasgow, Ltd., and Stelfox, J. C., manufacture of [water]gas, (P.), B., 477.
 Humphries, C. H., and Metals Protection Corporation, welding, (P.), B., 163.
 Humphries, C. H. See also Pierce, H. C.
 Humphries, J. E., condensations involving reactive methyl groups in heterocyclic bases, A., 414.
 Humphry, R. H., method for rapid determination of cataphoresis, A., 577.
 Humphry, R. H. and Jane, R. S., cataphoresis in colourless sols. I. Charge on rubber in benzene, A., 1204.
 Hunt, F., explanation of some phenomena in spectra of molecules, A., 657.
 Hunnus, determination of the potassium and phosphoric acid requirements of soil from the molecular composition according to Ganssen, B., 378.
 Hunt, A. F., and Turner, E. E., preparation of tertiary arsines by the Friedel-Crafts reaction, A., 186.
 Hunt, A. M., and American Magnesium Corporation, metal stock [for use as deoxidising agent], (P.), B., 62.
 Hunt, F. L., barium sulphate as a protective material against Röntgen radiation, A., 706.
 Hunt, F. S. See Cobb, R. M.
 Hunt, G. A. See Bent, H. E.
 Hunt, J. K. See Miller, E. R.
 Hunt, L. A. See Kennedy, J. E.
 Hunt, N. R., O'Donnell, F. G., and Marshall, R. P., steam and chemical soil disinfection with special reference to potato wart, B., 168.
 Hunt, R., effects of quaternary ammonium compounds on the autonomic nervous system, A., 1173.
 bio-assay of thyroid, B., 27.
 Hunt, S. B. See Ellis, C., and Mann, M. D., jun.
 Hunter, A., protein structure and proteolysis, A., 1265.
 Hunter, A. See also Eadie, G. S.
 Hunter, A. S., and Patrick, W. A., physical and colloid chemistry of salvarsan. II. Alkaline solution of salvarsan, A., 902.
 Hunter, C. M., atmospheric gas and oil burners, (P.), B., 909.
 Hunter, (Miss) F. M., latent heat of dilution of cane sugar [sucrose] solutions, A., 1103.
 Hunter, G., and Eagles, B. A., isolation of a new substance from blood and its bearing on determination of uric acid, A., 85.
 Hunter, G. F. See Pitman, E. C.
 Hunter, H. See Gough, G. A. C.
 Hunter, J. See McGougan, J.
 Hunter, R. F., aminobenzthiazoles. II. Naphthylaminonaphththiazole derivatives, A., 81.

Hunter, R. F., bromination of some 5-substituted 1-phenylbenzthiazoles, A., 626.
 halogenation of 2:6-dimethylbenzthiazole and of 3:5-diphenylimino-2:4-diphenyltetrahydro-1:2:4-thiodiazole, A., 626.
 1-m-toluidino-4-methylbenzthiazole hexabromide, A., 744.
 aminobenzthiazoles. III. Tautomerism and unsaturation of the aminothiazole system, A., 849.
 aminobenzthiazoles. IV. Stability of the bromides of the 1-xylyldino-1methylbenzthiazoles, A., 850.
 conditions underlying the formation of unsaturated and of cyclic compounds from halogenated open-chain derivatives in relation to the atomic volume tetrahedral theory. II. Products derived from α -halogenated adipic acids; halogenated glutaconic acids and a synthesis of the aromatic nucleus, A., 1125.

Hunter, R. F. See also Dyson, G. M.

Hunter, T. G. See Gordon, P. F.

Hunter, W. H., and Levine, A. A., oxidation of the tribromo- and trichloroderivatives of pyrogallol 1:3-dimethyl ether, A., 839.

Hunter, W. H., and Morse, M., oxidation of trichlorophenol, A., 839.

Huppert, O. See Ellenberger & Schrecker.

Huppke, W. F. See Gelbach, R. W.

Hurd, A. L. See Redfield, A. C.

Hurd, C. D., ketens in the Friedel-Crafts reaction, A., 70.
 acetylidylphenylamine from keten, A., 279.
 benzhydrylamine from benzophenoneoxime, A., 1133.

Hurrell, G. C., production of colloidal suspensions, (P.), B., 33.
 machines for emulsifying and disintegrating solids suspended in liquids, (P.), B., 223.
 preparation of cream of magnesia, (P.), B., 1013.

Hurtche, R., metabolism of the liver in chloroform and phosphorus poisoning, A., 200.

Hurtley, W. R. H., and Smiles, S., o-dithiobenzene, A., 948.
 2:2'-bis-1:3-benzidithiobenzene, A., 1150.

Huse, E., and Meulendyke, C. E., spectral sensitivity of silver iodide and mixtures of silver iodide and silver bromide, B., 611.

Huse, E. See also Jones, L. A.

Husein, S. M. See Warth, E. J.

Hussey, R. G., and Thompson, W. R., effect of radioactive radiations and X-rays on enzymes. IV. Effect of radiations from radium emanation on solutions of invertase, A., 202.
 effect of radiations from a mercury arc in quartz on enzymes. I. Effect of ultra-violet radiation on pepsin, A., 202.
 effect of radioactive radiations and X-rays on enzymes. V. Influence of variation of the thickness of the absorbing layer of solutions of pepsin on the rate of radiochemical inactivation of the enzyme. VI. Influence of variation of temperature on the rate of radiochemical inactivation of solutions of pepsin by β -radiation, A., 323.

Husson, A. L. See Goisset, P. F.

Hussong Dyeing Machine Co., apparatus for dyeing raw stock, (P.), B., 741*.

Husted, L. J., and Rounsevel, F. L., petroleum still, (P.), B., 908.

Hustin, R., fractional fusion of refractories, B., 157.

Huston, R. C., and Sager, D. D., effect of unsaturation of the activity of alcoholic hydroxyl. I. Action of allyl alcohol on benzene in the presence of aluminium chloride, A., 944.

Hutchinson, A., stereographic protractor for Lane photographs, A., 593.

Hutchinson, C. M., and Ramayyar, C. S., loss of sugar by inversion in [cane] sugar factories in Northern India, B., 203.

Hutchison, W. K., and Hinshelwood, C. N., interaction of hydrogen and nitrous oxide on the surface of gold, A., 807.

Hutchison, W. K. See also Hammick, D. L., and Hinshelwood, C. N.

Hutchisson, E., and Van Vleck, J. H., half quanta and the specific heat of hydrogen, A., 1078.

Huth, E. F., Ges. für Funkentelegraphie m.b.H., electric discharge vessels, tubes, and the like, (P.), B., 674.

Huthsteiner, H. See Duffendack, O. S.

Huttenlocher, R. See Küster, W.

Huttmann, K. See Prandtl, W.

Hutton, H. W., and Fulton, C. W., bitumen emulsions, (P.), B., 632.

Hutton, H. W. See also Fulton, C. W.

Hutton, U. O. See Schmidt, E. X.

Huxford, W., development and composition of potato plants under the influence of different manuring, B., 71.

Hybette, N. V., heat-resisting [iron] alloy, (P.), B., 96.

Hybette, N. V., and Anglo-Canadian Mining & Refining Co., Ltd., refining copper-nickel matte, (P.), B., 547.

Hybette, V. E., light aluminum alloy, (P.), B., 496.

Hyde, A. C., manufacture of superphosphates, (P.), B., 103.

Hyland, M. C., grain size and the quantum theory of photographic exposure, A., 796.

Hylleras, E., arrangement of atoms in tetragonal crystals of the mercurous halides, and the calculation of the optical double refraction of mercurous chloride, A., 114, 665.

atomic grouping in the tetragonal crystals of potassium metaperiodate, $K_4I_4O_9$, A., 1194.

Hyman, H., properties of some aluminium alloys, B., 328*.

Hynd, A., fate of blood-sugar after insulin injections in normal animals, A., 205.
 interaction of amino-compounds and carbohydrates. I. Action of carbamide on dextrose, levulose, and mannose. II. Preparation of glucoseureide, A., 601.

nature of urinary protein, A., 859.

Hyslop, J. F., factors governing the resistance of pots to glass attack, B., 745.

Hyslop, J. F. See also General Electric Co.

I. G. Farbenind. A.-G., manufacture of iron carbonyl, (P.), B., 439.
 continuous purification of salts, (P.), B., 487.
 obtaining perfumes from flowers and other parts of plants, (P.), B., 770.
 preparation of copper arsenate or copper arsenite, or double compounds containing chlorine, (P.), B., 743.
 production of diaminodiarlylurea [diaminodiarlycarbamide] or its derivatives, (P.), B., 769.

I. G. Farbenind. A.-G., manufacture of new complex antimony compounds, (P.), B., 805.
 manufacture of ammonium phosphates, (P.), B., 821.
 manufacture of diammmonium phosphate, (P.), B., 821.
 manufacture of mixed fertilisers, (P.), B., 843.
 manufacture of alkylated aromatic sulphonic acids, (P.), B., 850.
 gaseous fuels, (P.), B., 862.
 manufacture of new azo-dyes [from o-aminobenzaldehyde], (P.), B., 866.
 manufacture of benzanthrone derivatives containing sulphur, (P.), B., 867.
 manufacture of tanning agents, (P.), B., 891.
 stable emulsions of pyrethrum extract, (P.), B., 894.
 preparation of diphenylsuccinic dinitrile, (P.), B., 899.
 manufacture of compounds from 4-dimethylaminol-1-phenyl-2:3-dimethyl-5-pyrazolone and halogenated alcohols or their esters with carbamic acid, (P.), B., 931.
 production of [green] pigment colours, (P.), B., 955.
 production of anhydrous magnesium chloride, (P.), B., 979.
 bleaching [textile materials] with hypochlorites, (P.), B., 1011.
 manufacture of chromates, (P.), B., 1013.
 process for obtaining liquids in a solid form, (P.), B., 1029.

I. G. Farbenind. A.-G., and Balle, G., production of hard bituminous material of high fusing point from acid resins, (P.), B., 865.

I. G. Farbenind. A.-G., Balz, O., and Reusch, F., catalytic oxidation of ammonium, (P.), B., 915.

I. G. Farbenind. A.-G., and Benda, L., hydroxybenzoylamino-benzenearsonic acids, (P.), B., 770.

I. G. Farbenind. A.-G., Benda, L., and Schmidt, W., N -acyl derivatives of 5-amino-3-chloro-4-hydroxybenzene-1-arsenic acid, (P.), B., 846*.
 production of 3-chloro-5-amino-4-hydroxyphenyl-1-arsinic acid, (P.), B., 932.

I. G. Farbenind. A.-G., Biapin, J., and Strohmenger, L., preparation of sulphurised condensation products [dyes], (P.), B., 781.

I. G. Farbenind. A.-G., and Caspari, R., decomposition of chromium ores, (P.), B., 952.

I. G. Farbenind. A.-G., and Daimler, K., fixation of basic dyes, (P.), B., 873.

I. G. Farbenind. A.-G., and Dorrer, A., manufacture of yellow azo-dyes, (P.), B., 816.

I. G. Farbenind. A.-G., and Dreyer, U., production of arsenic trisulphide, (P.), B., 946.

I. G. Farbenind. A.-G., and Eisenhut, A., preparation of perfumes, (P.), B., 805.

I. G. Farbenind. A.-G., and Eissner, W., production of ammonium chloride crystals, (P.), B., 876.

I. G. Farbenind. A.-G., and Ernst, O., and Wahl, H., manufacture of ethylene chloride, (P.), B., 900.

I. G. Farbenind. A.-G., Eyer, K., and Griessbach, R., conversion of calcium nitrate into a readily distributable fertiliser, (P.), B., 893.

I. G. Farbenind. A.-G., and Falek, O., production of materials containing mercury in a finely-divided, stable condition, (P.), B., 899.

I. G. Farbenind. A.-G., and Farbenfabrik vorm. F. Bayer & Co., manufacture of new azo-dyes, (P.), B., 734.

I. G. Farbenind. A.-G., and Griessbach, R., fertiliser, (P.), B., 893.

I. G. Farbenind. A.-G., Griessbach, R., Röhre, K., and Eyer, K., production of sodium nitrate, (P.), B., 744.

I. G. Farbenind. A.-G., and Hahl, H., preparation of water-soluble complex antimony compounds of the quinoline series, (P.), B., 901.

I. G. Farbenind. A.-G., Herzberg, W., Spengler, O., and Schmid, A., preparation of chloro-derivatives of β -naphthol with free 1-position, (P.), B., 869.

I. G. Farbenind. A.-G., and Holl, A., halogenated vat dyes, (P.), B., 781.

I. G. Farbenind. A.-G., Koppe, P., and Oehler, H., continuous production of sulphur from ammonium polysulphide solution, (P.), B., 744.

I. G. Farbenind. A.-G., Kränlein, G., Sedlmayr, R., and Vollmann, H., preparation of halogenated dibenzopyrenequinones, (P.), B., 868.

I. G. Farbenind. A.-G., and Krzikalla, H., dyeing fast shades on animal fibres, (P.), B., 785.

I. G. Farbenind. A.-G., and Mariam, T., manufacture of tanning agents, (P.), B., 891.

I. G. Farbenind. A.-G., Marx, K., and Brodersen, K., manufacture of fluids for control of pests, (P.), B., 893.

I. G. Farbenind. A.-G., Meyer, K. H., and Hopff, H., dyeing cellulose esters, particularly cellulose acetate silk, (P.), B., 785.

I. G. Farbenind. A.-G., and Mieg, W., preparation of nitrogenous condensation products of the anthraquinone series [anthraquinonylcarbazoles], (P.), B., 868.

I. G. Farbenind. A.-G., Mittasch, A., and Wietzel, G., catalytic preparation of hydrogen and phosphoric acid, (P.), B., 916.

I. G. Farbenind. A.-G., and Müller-Cunradi, M., purification of the methyl alcohol, higher alcohols, esters, and the like, obtained synthetically by treatment of oxides of carbon with hydrogen, (P.), B., 901.

I. G. Farbenind. A.-G., Nawiasky, P., and Krauch, E., manufacture of grey to black vat dyes, (P.), B., 869.

I. G. Farbenind. A.-G., and Pistor, G., manufacture of phosphoric anhydride, (P.), B., 584.

I. G. Farbenind. A.-G., and Rassow, H., apparatus for containing hot solutions containing both ammonium chloride and ammonium nitrate, (P.), B., 876.

I. G. Farbenind. A.-G., Rath, J., and Christ, W., producing multicolour effects on vegetable fibres, (P.), B., 786*.

I. G. Farbenind. A.-G., and Ripke, O., production of sodium aurothiosulphate, (P.), B., 915.

I. G. Farbenind. A.-G., and Rudolph, G., production of colour-tone and coloured effects on vegetable fibres, (P.), B., 785.

I. G. Farbenind. A.-G., Schmidt, O., Eichler, T., and Seydel, K., cellulose-ester plastic and solution, (P.), B., 1010.

I. G. Farbenind. A.-G., Schmidt, O., and Johannsen, A., catalytic preparation of primary aromatic amines, (P.), B., 870.

I. G. Farbenind. A.-G., and Schmidt, W., producing magnesium-silicon alloy, (P.), B., 711*.
 magnesium alloys for hot forging, (P.), B., 885.

I. G. Farbenind. A.-G., Schneider, S., and Schweitzer-Hennig, F., removal of hydrogen sulphide from gases, (P.), B., 876.

I. G. Farbenind. A.-G., and Schnitzspahn, K., manufacture of [stable] preparations containing diazotised N -nitroaniline, (P.), B., 781.

I. G. Farbenind. A.-G., Siedler, P., and Moschel, W., preparation of chlorine water [for sterilising sewage], (P.), B., 934.

I. G. Farbenind. A.-G., Specketer, H., Münch, G., Marburg, E., and Handrich, W., preparation of alumina and its salts, (P.), B., 789.

I. G. Farbenind, A.-G., and Stöwener, F., manufacture of strongly adsorbent silicic acid, (P.), B., 744.

I. G. Farbenind, A.-G., Streitwolf, K., and Fritzsche, P., preparation of a derivative of 4-amino-2-*o*-uromercaptobenzoic acid stable in aqueous solution, (P.), B., 900.

I. G. Farbenind, A.-G., Thobe, C., and Benischek, A., transformer and switch oils, (P.), B., 712.

I. G. Farbenind, A.-G., and Weyland, H., preparation of water-soluble protein derivatives, (P.), B., 893.

I. G. Farbenind, A.-G., and Winkler, F., preparation of solutions of yellow arsenic, (P.), B., 744.

I. G. Farbenind, A.-G., Winkler, F., and Giller, F., production of colloidal sulphur, (P.), B., 916.

I. G. Farbenind, A.-G., and Wolfram, A., manufacture of vat dyes of the anthracene series, (P.), B., 868.

I. G. Farbenind, A.-G., and Zieser, W., manufacture of coloured rubber goods, (P.), B., 838.

Iebikawa, H. See Kita, G.

Iddings, C. See Porter, C. W.

Iddles, H. A. See Taylor, T. C.

Idzumi, S., biochemical and serological examination of hens' eggs during hatching, A., 857.

Imori, S., radioactive manganiferous nodules from Tanokami, Japan, A., 380, 494*.

Imori, S., and Yoshimura, J., pleochroic halos in biotite; probable independent origin of the actinium series, A., 990.

Ikeda, K., manufacture of glutamic acid and salts thereof, (P.), B., 420, 514*.

Ikeda, T., chemical composition of the vitreous body of the eye, especially of the extractive matter, A., 857.

Iki, T., variation of specific gravity of Japanese crude oils, B., 810.

Iberg, W., determination of Kerr constants in optically active substances, A., 337.

Ilisch, W., means for combating plant pests, (P.), B., 607.

Ilijin, B., hysteresis in sedimentation, I., A., 306.

dependence of heat of adsorption of a gas on a solid on pressure; extension of the laws of surface tension of solutions to the phenomena of gas adsorption, A., 1104.

Ilijin, W. S., synthesis of starch in plants in the presence of calcium and sodium salts, A., 439.

Illemann, R., manufacture of cement out of spent or waste lime, (P.), B., 668.

Illig, F., operation of carbonising and gasifying plant, (P.), B., 229.

Illingworth, S. R., and Illingworth Carbonization Co., apparatus for drying or preheating coal or like material, (P.), B., 146.

carbonisation of coal, (P.), B., 733*.

cooling of coke, (P.), B., 733*.

manufacture of briquettes, (P.), B., 1003.

Illingworth, S. R., Illingworth Carbonization Co., Ltd., Hempster, R., & Sons, Ltd., and Toogood, H. J., carbonisation of fuel, (P.), B., 228.

apparatus for carbonisation of fuel, (P.), B., 428.

Illingworth, S. R. See also Illingworth Carbonization Co., Ltd.

Illingworth Carbonization Co., Ltd., and Illingworth, S. R., carbonisation of coal, (P.), B., 305.

cooling of coke, (P.), B., 395.

Illingworth Carbonization Co., Ltd. See also Illingworth, S. R.

Illinois Anthracite Corporation. See Grant, W. M.

Illinois Graphite Co. See Copthorne, H. N.

Illinois-Pacific Glass Co., annealing glass, (P.), B., 709*.

electric glass-annalling lehrs, (P.), B., 1015*.

Illinois-Pacific Glass Co. See also Henry, K. M.

Imhoff, K., apparatus for the purification of sewage with activated sludge, (P.), B., 470.

biological purification of sewage with activated sludge, (P.), B., 614.

treatment of sewage, (P.), B., 698.

Imhoff, K., Fries, F., and Sierv, F., sewage treatment by activated sludge, (P.), B., 902.

Imhoff, M. See Berg, O.

Imhoff, W. G., and Smith, W. S., apparatus for hot galvanising, (P.), B., 196.

Immendorfer, A. See Bergmann, M.

Immendorfer, E. See Bergmann, M.

Immerheiser, K. See Badische Anilin- & Soda-Fabrik.

Imperial Institute, dugong oil from Australia, B., 199.

essential oil of camphor leaves and twigs from Uganda, B., 215.

essential oil of mossi bark from Papua, B., 215.

Medang losoh oil from the Federated Malay States, B., 215.

essential oil of *Origanum maru* from Cyprus, B., 215.

Induction Furnace Co. See Brayton, C. A., jun.

Industrial Appliance Co. See Ilunlap, F. L., and Guerrant, R. H.

Industrial Dryer Corporation. See Harris, G. D.

Industrial Waste Products Corporation. See Dickerson, W. H.

Ing, H. R., and Manske, R. H. F., modification of the Gabriel synthesis of amines, A., 1132.

Ing, H. R., and Perkins, W. H., jun., configuration of $\alpha\alpha'$ -dibromodibasic acids. IV. $\alpha\alpha'$ -Dibromoglutamic acids, A., 48.

Ing, H. R., and Robinson, R., orienting influence of free and bound ionic charges on attached simple or conjugated unsaturated systems. I. Nitration of some derivatives of benzylamine, A., 946.

Ingal, D. H., the high-temperature tensile curve, B., 328*.

Inge, L., and Walther, A., perforation of glass, A., 778.

Ingeberg, H. C. M., analysis of materials containing a mixture of metallic iron and iron oxides, B., 130.

Ingenieurges. für Wärmeleistung Akt.-Ges., smoke consumption in round pottery kilns, (P.), B., 632.

Ingerd, K. See Rutts, J.

Ingersoll, A. W., and Robbins, B. L., esters of the procaine type derived from nicotinic acid, A., 1158.

Ingersoll, C. D., hydrolysis of sucrose solutions by invertase, A., 641.

Ingham, G., relative availability of phosphatic fertilisers on acid and non-acid soils, B., 840.

relative merits of mono-, di-, and tri-calcium phosphates as soil fertilisers, B., 892.

Ingold, C. K. See Midland Coal Products, Ltd.

Ingold, C. K., and Ingold, (Mrs.) E. H., alternating effect in carbon chains. V. Aromatic substitution with reference to the respective roles of polar and non-polar dissociation; relative directive efficiencies of oxygen and nitrogen, A., 833.

Ingold, C. K., and Shoppee, C. W., constitution of the yellow sodium compounds from ethyl citraconate (or itaconate) and ethyl sodiummalonate, A., 1039.

Ingold, C. K., Shoppee, C. W., and Thorpe, J. F., mechanism of tautomer interchange and effect of structure on mobility and equilibrium. I. Three-carbon system, A., 939.

Ingold, C. K. See also Baker, J. W., Cooper, K. E., Gane, R., Goss, F. R., Hassell, A., and Holmes, E. L.

Ingold, (Mrs.) E. H. See also Cooper, K. E., Holmes, E. L., and Ingold, C. K.

Ingram, S. B. See Bowen, I. S.

Innes, R. F., report of the International Commission on the analysis of chrome leathers and chrome liquors, B., 163.

Inoko, S. See Nakazono, T.

Inokuchi, K., separation of ricinolice acid from the mixed fatty acids of castor oil, B., 235.

Inoue, H., catalytic action of Japanese acid earth. II. Action on oximes, A., 1110.

catalytic action of Japanese acid earth. I. Action on a mixture of aniline and methyl alcohol, A., 1132.

catalytic action of Japanese acid earth. III. Action on primary aliphatic alcohols, A., 1216.

Inoue, T., absorption spectra of salt solutions of some rare-earth elements, A., 883.

microchemical determination of calcium in urine, A., 984.

Inouye, J., production of black ink [from nitro-diunaphthyleuc dioxide] resistant to the action of acids and water, (P.), B., 696.

process of manufacturing acid-proof and water-proof black ink, (P.), B., 638.

Inouye, K. See Yamamoto, H.

Inouye, R., equilibrium in the system potassium sulphate, potassium nitrate, water at 25° A., 26.

Inouye, R. See also Osaka, Y.

Inspiration Consolidated Copper Co. See Arsdale, G. D. ran.

Institution of Gas Engineers, Gas Investigation Committee, studies in carbonisation. I. Influence of size of coal, B., 1001.

examination of products of combustion from typical gas appliances, B., 1002.

International Agricultural Corporation. See Barr, J. A.

International Combustion, Ltd. See Rosencrantz, F. H.

International Combustion Engineering Corporation, pulverising and drying of materials, (P.), B., 114.

[coal] pulverising apparatus, (P.), B., 940.

International Combustion Engineering Corporation, and Kreisinger, H., apparatus for drying fuel, (P.), B., 533*.

International Combustion Engineering Corporation, and Runge, W., carbonisation of coal, (P.), B., 428, 812.

International Combustion Engineering Corporation. See also Bell, J. E.

International Filter Co., base exchange materials, (P.), B., 470*.

International Filter Co. See also Behrman, A. S.

International General Electric Co., and Allgemeine Elektricitäts-Ges., obtaining boiler feed water, (P.), B., 518*.

International General Electric Co., and Lüdke, B., electrodes for electric arc furnaces, (P.), B., 192*.

International Holding Co. See Nieca, F. G.

International Motor Co. See Day, W. E., jun.

International Nahrmungs- & Genussmittel Akt.-Ges., method for isolating the aromatic principle contained in roasted coffee, (P.), B., 1028.

International Nickel Co., manufacture of alloys, (P.), B., 97*.

International Nickel Co., and Mudge, W. A., manufacture of alloys, (P.), B., 884.

International Nickel Co., and Stanley, R. C., separating nickel and copper from copper-nickel mattes or other material, (P.), B., 921*.

International Nickel Co. See also Leliev, O., and Merica, P. D.

International Patents Development Co. See Newkirk, W. B.

International Precipitation Co. See Anderson, E., Horne, G. H., Viets, F. H., Weiskopf, C. H., and Welch, H. V.

International Sugar and Alcohol Co., Ltd., decolorising and purifying solutions, (P.), B., 256.

Internationale Bergin-Comp. voor Olie en Kolen-Chemie, process for splitting coal, oils, and other hydrocarbons, by heating these initial materials with hydrogen under high pressure, (P.), B., 33.

Internationale Galalith-Ges. Hoff & Co., manufacture of shaped articles from artificial horn made of casein, (P.), B., 1022.

Internationale Galalith-Ges. Hoff & Co., Bartels, A., and Eberhardt, G., utilising casein- and other protein-formaldehyde compounds, (P.), B., 335.

Interstate Chemical Co. See Cohen, J. S.

Ionesco, T. V., velocity of sound in liquids and its relation to the heat of vaporisation, A., 31.

ratio *c/m* in metals, A., 448.

Ionescu, A., Bibescu, I., and Popescu, D., determination of uric acid in blood, A., 443.

Ipatiev, V. N. [with Klyukvin, N., Kisselov, A. I., Kondyrev, N., V., and Nikolsajev, W. I.] displacement of metals, metalloids, and their oxides from solution by hydrogen under pressure, A., 921.

Ipatiev, V. N., and Andrejevskii, A., displacement of platinum by hydrogen at high pressures, A., 921, 1219*.

Ipatiev, V. N., and Dolgov, B., hydrogenation of triphenylcarbinol and 9-phenyl-fluorocyl alcohol under pressure, A., 949, 1244*.

Ipatiev, V. N., and Mourontsev, B. A., reduction of chromic compounds by hydrogen under pressure and at high temperatures, A., 1114, 1219*.

Ipatiev, V. N., and Nikolsajev, W., action of hydrogen and water on phosphorus at high temperature under pressure, A., 487.

Ipatiev, V. N., and Orlov, J., formation of cyclohexyl ether, A., 59.

Ipatiev, V. N., Orlov, N., and Petrov, A., action of high temperature and pressure on some benzoic acid derivatives, A., 724.

Ipatiev, V. N., Orlov, J., and Razubaleyev, G., reaction between methyl alcohol and phenol at high temperature under pressure, A., 281.

Ipatiev, V. N., and Petrov, A., catalytic condensation of acetone at high temperatures and pressures, A., 1130.

hydrolysis of salts of aromatic sulphonic acids at high temperatures and pressures, A., 1131.

Ipatiev, V. N., and Razubaleyev, G., hydrogenation of aromatic acids and their salts under pressure. I. and II., A., 400, 1138.

condensation of lactic acid to methylsuccinic acid under the influence of the combined action of catalysts at high pressures and temperatures, A., 1124.

Ipsen, C. L. See British Thomson-Houston Co., Ltd.

Iredale, T., drop-weight method of measuring surface tension, A., 790.

Ireton, H. J. C. See Buffam, (Mits.) M. C. W., and McLennan, J. C.

Irger, J., iron metabolism of the animal organism after splenectomy, A., 540.

Iriyai, A., separation of oil mixtures [separating phenols from low-temperature tar], (P.), B., 184.

Irish, O. J. See Roe, J. H.

Irmann, R., behaviour of aluminium towards iron at high temperatures, B., 541.

Ironsides, E. A., extraction and recovery of volatile liquids, (P.), B., 315.

Irvin, R. See Kohman, H. A.

Irvin, W. T., and Celite Co., heat-insulating material, (P.), B., 241.

Irvine, (Sir) J. C., and Black, I. M. A., constitution of maltose, A., 602.

Irvine, (Sir) J. C., and Macdonald, J., constitution of polysaccharides. X. Molecular unit of starch, A., 523.

Irving, (Sir) J. C., and Oldham, J. W. H., synthesis of β -D-(or β -D)-trimethyl-glucose, A., 149.

polymerisation of β -glucosan; constitution of synthetic dextrans, A., 153.

Irving, (Sir) J. C., and Robertson, G. J., constitution of polysaccharides. IX. Degradation of cellulose to an anhydrotrisaccharide, A., 823.

Irvine, (Sir) J. C., and Skinner, A. F., behaviour of mannosediacetone [mannose diisopropylidene ether] on methylation, A., 714.

Irving, J. T., degradation of dextrose by the blood-corpuscles of the rabbit, A., 554.

Irving, J. T., and Kay, H. D., *in vivo* permeability of the red corpuscles of the rabbit, A., 421.

Irving, L., solubility of calcium in blood serum, A., 855.

relation of solubility to absorption of calcium salts from the intestine, A., 972.

precipitation of calcium and magnesium from sea water, A., 1021.

Irvington Smelting and Refining Works. See Dassbach, A.

Irwin, M., accumulation of brilliant-cresyl-blue in the sap of living cells of *Nitella* in the presence of ammonia, A., 204.

mechanism of the accumulation of dye in *Nitella* on the basis of the entrance of the dye as undissociated molecules, A., 647.

exit of dye from living cells of *Nitella* at different p_{H_2} values, A., 1179.

Irwin, P. L., fatigue of metals by direct stress, B., 517.

Isaacs, M. A. See Bassett, H. P.

Isabellinelliite Ges.m.b.H. See Heusler, F.

Isajev, J. V., isomaltose, A., 714.

Isajev, V., production of bornyl esters from pinenes or mixtures containing pinenes for the manufacture of camphor, (P.), B., 608.

Isakson, A. See Fréderieksz, V.

Iball, H. S. See Ellis, N. R.

Ibelin, E., toxicity of arsenic under reduced atmospheric pressure, A., 200.

Isenberg, H. O. C., and General Chemical Co., producing sulphur dioxide and apparatus therefor, (P.), B., 875.

Isgarichev, N. A., significance of hydration and adsorption in the mechanism of the production of E.M.F., A., 802.

Isgarichev, N. A., and Bogomolova, M. I., velocities of chemical reactions in presence of organic colloids, A., 132.

coagulation of proteins by means of different organic acids in relation to their structure, A., 472.

Isgarichev, N. A., and Pomeranzova, A., swelling in presence of organic acids in connexion with their structure, A., 472.

Ishibashi, K. See Oshima, Y.

Ishigaki, T. See Ishiwara, T.

Ishihara, M. See Atsuki, K.

Ishikawa, F., and Kimura, G., barium dithionate and the solubility of calcium dithionate, A., 237.

Ishikawa, F., and Shibata, E., thermodynamic studies on zinc iodide and mercurous iodide, A., 1103.

Ishikawa, M. See Kendall, A. I.

Ishikawa, T., reciprocal salt pair $[K, (NH_4)_2] - [SO_4, CrO_4]$ at 25°, A., 1102.

Ishinada, K. See Ueda, Y.

Ishiwara, T., Yonekura, T., and Ishigaki, T., ternary diagram of the system iron-carbon-copper, A., 683.

Ishibashi, T., influence of some elements on spheroidisation of carbides in steels, B., 92.

equilibrium diagram of the aluminium-zinc system, B., 672.

equilibrium diagram of copper-tin system, B., 671.

Island, J. S., nitric oxide by electrical methods, (P.), B., 592.

apparatus for electric formation of oxides of nitrogen, (P.), B., 835*.

Iller, H. See Hartmann, M.

Isler, M., Mechel, L. von, and Society of Chemical Industry in Basle, azo-dyes and process of making same, (P.), B., 1007*.

Isler, M. See also Society of Chemical Industry in Basle.

Isley, G. H. See Lummis, C. W.

Isnard, E., uranium compounds of hexamethylenetetramine, A., 1158.

Isom, E. W., Bell, J. E., and Sinclair Refining Co., condensing [hydrocarbon] vapours, (P.), B., 6, 352.

condenser, (P.), B., 81.

apparatus for condensing [hydrocarbon] vapours, (P.), B., 397.

Isom, E. W., and Sinclair Refining Co., cracking hydrocarbon oil, (P.), B., 431.

Isom, E. W. See also Herthel, E. C.

Isomir, K. See Mil, T.

Istrati, M. I., coefficient of interior thermal conductivity of mercury, A., 462.

Itagaki, T. See Takahashi, E.

Italine, L. van and Steenhauer, A. J., microchemical reactions for the identification of p -hydroxyphenylethylamine (tyramine) and 4- β -aminoethylglyoxaline (histamine), A., 182.

Itelsohn, R. See Jellinek, K.

Ithurral, E. M. F., and Morera, V., determination of haemoglobin in blood, A., 1267.

Ito, S. See Matsui, M.

Itó, T., zonal growth of plagioclase and soda-orthoclase in syenitic magma, A., 934.

Ittner, M. H., progress in the soap industry during the last fifty years, B., 837*.

Ivanitzkaja, A., and Proskurnin, M., cataphoresis of colloidal solutions at small electrolyte concentrations, A., 679.

Ivanov, D., preparation of phenols from magnesium organo-derivatives, A., 395.

Ivanov, N. N., origin of carbamate produced by lower fungi, A., 97.

protein of the protoplasm of *Myzomycetes*, A., 97.

trehalose and trehalase in *Myzomycetes*, A., 97.

γ -carbamide [formed] by bacteria, A., 1062.

Ivanov, N. N. See also Behrens, M.

Ivánovics, G. See Born, J.

Ivanovski, H. See Kultjugin, A., and Stadnikov, G. J.

Ivanovsky, N. I., furnace, (P.), B., 114.

Ives, H. E., positive rays produced in thermionic vacuum tubes containing alkali metal vapours, A., 218.

Ives, H. E., and Johnsrud, A. L., influence of temperature on the photo-electric effect of alkali metals, A., 217.

electrical and photo-electric properties of thin films of rubidium on glass, A., 998.

Ivy, A. C. See Koskowsky, W.

Iwasaki, C., fundamental study of Japanese coal. III. Relation between microscopic structure and chemical properties, B., 393.

Iwasaki, K., "nco-glucosid," A., 1279.

Iwasaki, K. See also Rona, P.

Iwasaki, S. See Kita, G.

Iwasaki, T., fungi which grow on coal, B., 393.

Iwata, H., disintegration of rice straw [to increase its fodder value], B., 765.

Iwatsuki, R., hydrolysis of polysaccharides by yeast, A., 323.

fermentation of α -ketoglutaric acid by *Bacterium xylinum*, A., 435.

hydrolysis of salts of monophosphoric and monoethylphosphoric acids by plant and animal phosphatases, A., 867.

Iyer, S. N., and Simonsen, J. L., catalytic hydrogenation of carone, A., 1042.

Iyer, S. N. See also Patel, C. K.

Izmański, V. A., free alkali in soap, B., 923.

Izmański, V. A., and Kolpenski, V. N., passivity of zinc dust in the alkaline reduction of nitro-compounds, A., 248, 827.

J. See Jabłczyński, K.

Jabłczyński, K., Licsegang rings, A., 1100.

Jabłczyński, K., Kawenoki, (Mits.) G., and Kawenoki, (Mits.) J., velocity of coagulation of colloids in presence of a peptising agent, A., 1203.

Jabłczyński, K., and Kobryner, S., rhythmic formation of precipitates; Licsegang's rings, A., 473, 791*.

Jabłczyński, K., and Rytel, Z., autolytic decomposition of thiosulphuric acid, A., 913.

Jabłczyński, K., and Stückgold, M., iodine and ferrous salts, A., 913.

Jabłczyński, K., and Wąsarszka-Rytel, (Mits.) Z., autocatalytic decomposition of thiosulphuric acid, A., 482.

Jabłczyński, K., and Wicchowski, W., stannous phosphates, A., 588, 924*.

Jackman, A. J., and Vesuvius Crucible Co., method of making crucibles, (P.), B., 241.

refractory article, (P.), B., 542.

Jackman, D. N. See British Launderers' Research Assoc., and Parker, R. G.

Jackman, H. W., ammonia recovery [from coal gas] by gypsum, B., 809.

Jackson, E. L., addition of methyl hypobromite and methyl hypochlorite to certain ethylene derivatives, A., 1023.

Jackson, F. G., absorption of sulphur dioxide from kiln gases by ceramic ware, B., 540.

Jackson, L. C., magnetic moment of the orbit of the valency electron of the solid alkali metals, A., 448.

orientation of the oxygen molecule in a magnetic field, A., 657.

atomic structure and the magnetic properties of co-ordination compounds, A., 773.

Kaufmann's experiment and the spinning electron, A., 991.

investigations on paramagnetism at low temperatures, II., A., 1197.

Jackson, L. E., industrial requirements for dry cleaner's naphtha, B., 348.

Jackson, R. See Herbert, A.

Jackson, R. F., Silsbee, C. G., and Proffitt, M. G., preparation of levulose, B., 560.

Jackson, W. J., secondary emission from metals due to bombardment of high-speed positive ions, A., 1074.

Jacob, M., use of measurements of magnetic rotation for analysis of mixtures, A., 374.

Jacobi, M. See Henkel & Co.

Jacobi, R. See Wieland, H.

Jacobs, C. B., and Du Pont de Nemours & Co., E. I., casting having silicon-alloy surface, (P.), B., 673.

method of removing liquid from cyanides, (P.), B., 743.

Jacobs, W. A., and Collins, A. M., strophanthin. VIII. Carbonyl group of strophanthin, A., 73.

Jacobs, W. A., and Gustus, E. L., saponins. IV. Oxidation of hederagenin methyl ester, A., 1250.

Jacobs, W. A., and Hoffmann, A., structural relationships of the cardiac poisons, A., 430.

strophanthin. IX. Crystalline kombe strophanthin, A., 618.

strophanthin. X. Kombe-strophanthin-B and other kombe-strophanthins, A., 682.

Jacobs, W. A., Hoffmann, A., and Gustus, E. L., association of double linking with lactone group in cardiac aglycones, A., 1260.

Jacobs, W. A. See also Sayers, R. R.

Jacobson, J. C., capture of electrons by α -particles in hydrogen, A., 655.

Jacobsen, I. H. H., treatment of growing plants [fungicide], (P.), B., 1025.

Jacobson, F., modification of the Höchst method for the determination of anthracene, B., 734, 942*.

Jacobson, F. See also Mallison, H.

Jacobson, P. See Heller, G.

Jacobson, A. E., grinding machine, (P.), B., 301.

Jacobson, B. H. See Klipstein, E. C., & Sons Co.

Jacobsson, R., method of producing pure alumina, (P.), B., 89, 192*.

Jacoby, M., ultrafiltration of urease solutions, A., 434.

hydrogen cyanide in the metallic poisoning of enzymes, A., 1058.

Jacquelain, A. P. See Choffel, C.

Jacquot, R., and Mayer, A., equilibrium of cellular constituents and cellular oxidation intensity: imbibition and oxidation in seeds, A., 208.

Jäger, A., and Winkelmann, H., reduction of carbon monoxide under ordinary pressure, B., 698.

Jäger, A. See also D'Ans, J., and Fischer, F.

Jäger, F. M., crystal forms of some position-isomeric dinitrotoluenes, A., 720.

atomic weight and isotope-ratio of silicon, A., 879.

crystal forms of derivatives of ethoxy- and trimethyl-benzophenones, A., 890.

crystal forms of some organic nitrogen compounds, A., 890.

Jaeger, *F. M.*, methods of physico-chemical research at very high temperatures, *A.*, 895.
 racemic and optically active α -phenanthrolinediethylenediaminecobaltic salts and the reaction between mono- or di-amines and diethylenediamine-dichloro- or -chloroaceto-salts, *A.*, 1157.
 Jaeger, *F. M.*, and Koets, *P.*, complex cobaltic salts with nonovalent ions, *A.*, 697.
 Jaeger, *F. M.*, Terpstra, *P.*, and Westenbrink, *H. G. K.*, crystal structure of germanium tetralodide, *A.*, 339.
 Jaeger, *H. G.*, [magnesium oxychloride cement] railroad tie, *(P.)*, *B.*, 363.
 Jaeger, *J. T.*, cooking wood chips, *(P.)*, *B.*, 356.
 Jaeger, *W.*, and Meissner, *W.*, measurement of the permeability and hysteresis of ferromagnetic substances for high frequencies and the fundamental equations for ferromagnetism, *A.*, 566.
 Jaeger, *W.*, and Steinwehr, *H.*, iron, heat of combustion of benzoic acid, *A.*, 477.
 Jänecke, *E.*, phase equilibria of sulphates, *A.*, 358.
 constitution of cement, *B.*, 747.
 phase equilibria of sulphates. II. [Roasting of lead ores], *B.*, 883.
 Jaenike, *J.* See Haber, *F.*
 Jarvinen, *K. A.*, solubility of the metals of cooking utensils, and the determination of dissolved metals, *B.*, 16.
 determination of sulphur in iron, *B.*, 983.
 Jagrowski, *L. H.* See Leslie, *E. H.*
 Jahl, *A.*, production of barium hydroxide from barium sulphide, *(P.)*, *B.*, 438.
 conversion of soluble sulphides into chlorides and sulphur, *(P.)*, *B.*, 666.
 production of *blanc fixe* from barium sulphide, *(P.)*, *B.*, 379.
 Jahn, *A.* and Michael & Co., *J.*, producing barium chloride, *(P.)*, *B.*, 822.
 Jahn, *R.* See Oester, *Bamag-Blättner-Werke A.-G.*
 Jahns, *F.*, production of gas of low moisture content from fuel of high moisture content, *(P.)*, *B.*, 573.
 Jahoda, *R.*, and Lillienfeld, *L.*, fluorescent screen for use with *X*-rays, *(P.)*, *B.*, 220.
 Jahr, *R.*, relation between the colour sensitivity of emulsions of the same kind, but of differing silver iodide content, *B.*, 646.
 Jahr, *W. M. R.*, acidising [carbonising] textile fabrics, *(P.)*, *B.*, 740*.
 Jajte, *S.* See Miobedzki, *T.*
 Jakes, *F.* See Vavon, *G.*
 Jakob, *J.*, manufacture of artificial stone, *(P.)*, *B.*, 130.
 Jakowsky, *J. J.*, manufacture of carbon black, unsaturated gases, and hydrogen, *(P.)*, *B.*, 924.
 Jakinson, *S.*, electrical conductivity in benzene solutions, *A.*, 29, 801*.
 Jaloustre. See Averseng.
 Jaloustre, *L.* See Laborde, *E.*
 James, *A. A.*, Laughton, *N. B.*, and Macallum, *A. B.*, control of blood pressure with hepatic extract, *A.*, 319.
 James, *A. E.* See Burrows, *G. J.*
 James, *C.* See Goggin, *J. F.*, and Rice, *A. C.*
 James, *F.* See Carter, *S. R.*
 James, *G. M.* See Harned, *H. S.*
 James, *J. H.*, and Byrnes, *C. P.*, preserving wood, *(P.)*, *B.*, 56.
 partially oxidising gaseous hydrocarbons, *(P.)*, *B.*, 770.
 making low-boiling hydrocarbons from petroleum, *(P.)*, *B.*, 972.
 oxidising heavy hydrocarbons, *(P.)*, *B.*, 972.
 treating liquid hydrocarbons, *(P.)*, *B.*, 973.
 James, *R. W.*, and Randall, *J. T.*, scattering powers of calcium and fluorine for *X*-rays, *A.*, 663.
 James, *R. W.*, and Wood, *W. A.*, crystal structure of barytes, celestine, and anglesite, *A.*, 13.
 structure of barium sulphate, *A.*, 13.
 James, *R. W.* See also Bragg, *W. L.*
 Jamei, *A.* See Meunier, *L.*
 Jamieson, *G. S.*, and Baughman, *W. F.*, constituents of crude cottonseed oil, *B.*, 592.
 Jamison, *L. A.* See Peterson, *W. H.*
 Jancke, *W.* See Herzog, *R. O.*
 Jander, *G.*, and Pfundt, *O.*, visual conductometric titrations, *A.*, 700.
 determination of ammonia nitrogen in fertilisers by visual conductometric titrations, *B.*, 684.
 Jander, *G.*, and Ruperti, *O.*, precipitation of aluminium as hydroxide by means of ammonia, *A.*, 701.
 Jane, *R. S.* See Hatschek, *E.*, Humphrey, *R. H.*, and Whithy, *G. S.*
 Jangmichl, *E.*, and Hackl, *J.*, use of "aktivin" in volumetric analysis [of mordants etc.], *J.*, *B.*, 913.
 Janicki, *L.*, and Lau, *E.*, problem of fine structure, *A.*, 1.
 Janicki, *L.* See also Gehrcke, *E.*
 Janisch, *J.* See Goy, *S.*
 Janistyn, *H.*, manufacture of nitrides, *(P.)*, *B.*, 744.
 Janke, *A.*, and Kropacsky, *S.*, colorimetric determination of hydrogen-ion concentration, *A.*, 927.
 Jankus, *J. C.* See Otto, *S.*
 Jannek, *J.* See Badische Anilin- & Soda-Fabrik.
 Janot, *M. M.* See Delaby, *R.*
 Jansen, *(Mis.) A. F. J.* See Keesom, *W. H.*
 Jansen, *B. C. P.*, and Donath, *W. F.*, antineuritic vitamin, *A.*, 644.
 Jansen, *J. D.*, and Sebut, *W.*, determination of mixtures of two and three [vegetable] oils by incans of separation temperatures from various solvents, *B.*, 987.
 Janser, *A.* See Friedländer, *H.*
 Janser, *J.*, sizing paper, *(P.)*, *B.*, 10.
 Janssen, *H.* See Tanb, *L.*
 Jaramillo, *G.*, rapid determination of organic nitrogen, *A.*, 1163.
 Jarell, *T. D.* See Veitch, *F. P.*
 Jascourt, *J.* See Seal Co. (London), *Ltd.*
 Jasse, *O.*, structure of the bands 4511 and 4123 in the spectrum of carbon monoxide, *A.*, 452.
 Jatkær, *S. K. K.*, and Watson, *H. E.*, alum as catalyst for production of ether [from alcohol], *B.*, 555.
 production of ether by solid catalysts, *B.*, 963.
 Jatrides, *D.* See Sakellarious, *E.*
 Jaudas, *K.* See Höpfner, *W.*
 Jauncey, *G. E. M.*, conservation of momentum and the Döppler principle, *A.*, 333.
 quantum theory of the unmodified line in the Compton effect, *A.*, 768.
 Jauncey, *G. E. M.*, and Boyd, *R. A.*, disappearance of the unmodified line in the Compton effect, *A.*, 1187.
 Jauncey, *G. E. M.*, and Hughes, *A. L.*, radiation and the disintegration and aggregation of atoms, *A.*, 451.
 Jauncey, *G. E. M.* See also Hughes, *A. L.*
 Jausseran, *C.* See Buisson, *H.*
 Javillier, *M.*, bichancing and artificial maturation of flour, *B.*, 211.
 Javillier, *M.*, and Allard, *H.*, existence of a characteristic level of nucleic phosphorus of tissues, *A.*, 969, 1167*.
 phosphorus balance in tissues, *A.*, 1268.
 Jean, *C. H. R. Z.* See Favrel.
 Jean, *P. P.* See Brehier, *C.*
 Jeantet, *P.* See Duciaux, *J.*
 Jecusco, *F. P.*, addition of light to accelerated ageing [of rubber], *B.*, 452.
 Jedlicka, *V.*, blood lipase, *A.*, 860.
 Jedlicka, *V.*, and Kreislinger, *V.*, detection of pancreatic lipase in serum in pancreatic disease, *A.*, 860.
 Jedzejowski, *H.*, method of preparation of sources of radium-*B* + *C*, *A.*, 771.
 Jedzejowski, *H.* See also Roupert, *C.*
 Jefferson, *R. E.* See Rheed, *T. F. E.*
 Jeffrey, *G. H.* See Baldwin, *O. R.*
 Jeffrey, *G. H.*, and Warrington, *A. W.*, silver carbonate, *A.*, 694.
 Jeffrey Manufacturing Co., pulverising apparatus, *(P.)*, *B.*, 937.
 Jeffries, *Z.*, Archer, *R. S.*, and Aluminum Co. of America, aluminium-copper alloy, *(P.)*, *B.*, 369.
 aluminium-silicon alloy, *(P.)*, *B.*, 360.
 Jeffries, *Z.*, Archer, *R. S.*, and American Magnesium Corporation, heat-treating magnesium alloy, *(P.)*, *B.*, 792.
 Jeffries, *Z.* See also Johnston, *R. L.*
 Jellinski, *H.*, separation by centrifugal force of alloyed or dissolved substances in the liquid state, *(P.)*, *B.*, 756.
 Jelley, *E. E.*, production of photographs on parchment, paper, etc., *(P.)*, *B.*, 693.
 Jelinek, *K.*, chemical constants of bromine, *A.*, 669.
 Jelinek, *K.*, and Czerwinski, *J.*, titration of mercury with potassium cyanide, lead with arsenate, and iron with thiosulphate, *A.*, 262.
 Jelinek, *K.*, and Itelsohn, *R.*, equilibrium in the action of gaseous hydrogen chloride on potassium bromide, *A.*, 909.
 Jelinek, *K.*, and Rudat, *A.*, equilibrium in the action of oxygen on solid metal chlorides (cupric, nickel, and cobalt chlorides), *A.*, 909.
 Jelinek, *K.*, and Ulloth, *R.*, iodine and bromine tensions of metallic iodides and bromides, *A.*, 463.
 chlorine tensions of metallic chlorides; chemical constants of chlorine, *A.*, 682.
 Jena, *E.*, purification or separation of aliphatic hydrocarbons, *(P.)*, *B.*, 184.
 Jenner Glaswerk Schott & Gen., glasses, *(P.)*, *B.*, 274.
 [Fritted quartz] filters, *(P.)*, *B.*, 423.
 Jenner Glaswerk Schott & Gen., Schott, *O.*, and Thieme, *H.*, glasses, *(P.)*, *B.*, 55.
 Jendrassik, *L.*, influence of adsorbents on surface tension, *A.*, 573.
 Jendrassik, *L.*, and Annan, *E.*, pharmacology of changes of concentration. III. Action of cations, *A.*, 91.
 Jendrassik, *L.*, and Antal, *L.*, pharmacology of changes of concentration. IV. Action of anions, *A.*, 755.
 Jendrassik, *L.*, and Geldrich, *J.*, dependence of the surface tension of the blood on the hydrogen-ion concentration, *A.*, 969.
 Jendrassik, *L.*, and Moser, *E.*, calcium ionisation in physiological solutions, *A.*, 1172.
 Jenge, *W.* See Schulz, *E. H.*
 Jenisch, *W.*, ripening of photographic silver halide emulsions, *B.*, 965.
 Jenison, *G. C.*, and Kremers, *R. E.*, *Mentha. VI.* Volatile oil of a strain of Japanese peppermint grown at Madison, Wisconsin, *B.*, 803.
 Jenke, *M.*, Ungerer's system for digesting wood by the soda process, *B.*, 9.
 Jenke, *M.* See Thannhauser, *S. J.*
 Jenkins, *C. H. M.*, determination of the vapour tensions of mercury, cadmium, and zinc by a modified manometric method, *A.*, 233.
 physical properties of the copper-cadmium alloys rich in cadmium, *B.*, 328*.
 constitution and physical properties of alloys of cadmium and zinc, *B.*, 831.
 Jenkins, *F. A.*, line spectra of isotopes, *A.*, 771.
 Jenkins, *F. A.* See also Harkins, *W. D.*
 Jenkins, *H. G.* See Johnson, *R. C.*
 Jenkins, *J. D.*, Berger, *E. F.*, and Pittsburgh Plate Glass Co., process of manufacturing arsenates, *(P.)*, *B.*, 876.
 Jenkins, *R. L.* See Adams, *R.*, and Grignard, *V.*
 Jennings, *E. de W.* See Wheeler, *A. S.*
 Jenny, *A.*, Angerstein, *J.*, and American Electro-Osmosis Corporation, manufacture of gelatin suitable for [photographic] emulsions, *(P.)*, *B.*, 388*.
 Jensen, *B. M.* See Andersen, *A. C.*
 Jensen, *F. W.*, and Upson, *F. W.*, oxidation of dextrose by means of copper in sodium carbonate solution (Saldain's reagent), *A.*, 149.
 Jensen, *H.*, and Howland, *L.*, synthesis of β -amino-9-ethylacridine [5β -amino-ethylacridine], *A.*, 959.
 Jensen, *H.* See also Homberger, *A. W.*
 Jensen, *H. H.*, [physiological activity of] benzyl compounds and the importance of substitution in the benzyl nucleus and the significance of side-chains, *A.*, 91.
 Jensen, *J. O.*, oil coking still, *(P.)*, *B.*, 864.
 Jenzsen, *J. D.*, and Jenzsen Co., *G. D.*, producing acid liquor in sulphite pulp processes, *(P.)*, *B.*, 483.
 Jenzsen Co., *G. D.* See Jenzsen, *J. D.*
 Jephcott, *C. M.*, reaction of quinolinic anhydride with aromatic hydrocarbons and aluminium chloride, *A.*, 304.
 Jephcott, *H.*, and Bacharach, *A. L.*, effect of drying on the vitamins of milk, *B.*, 718.
 Jepson, *D.* See Lobley, *A. G.*
 Jermelias, *B.* See Curtius, *T.*
 Jersey, *V.* See Beard, *H. H.*
 Jessen, *W.*, effect of nitrogenous manuring of grass land on the proportion of grasses and clovers, *B.*, 959.
 Jessen-Hansen, *H.*, determination of mixtures of sucrose and invert sugar or lactose, *B.*, 294.
 Jessop, *G.* See Adam, *N. K.*
 Jessup, *G.* Moore Paper Co. See Plumstead, *J. E.*
 Jevons, *W.*, band spectrum of tin monochloride exhibiting isotope effects, *A.*, 222.
 more refrangible band system of cyanogen as developed in active nitrogen, *A.*, 992.

Jewell, F. O., and Jewell, H. S., hydrometer, (P.), B., 114*.
 Jewell, H. S. See Jewell, F. C.
 Jewell, W. M., and Chlorine Products Co., method and apparatus for liquefying chlorine, (P.), B., 584.
 Jilek, A., and Lukas, J., electrolytic separation of copper from cadmium, A., 262.
 Jilek, A. See also Hanuš, J., and Lukas, J.
 Jiročka, B., and Consten, F., metal coatings on aluminium and aluminium alloys, (P.), B., 496.
 Jirsa, E., formation of disperse systems by the electrolysis of aqueous solutions by direct and alternating currents, A., 1093.
 Jirsa, F., and Diamant, J., thermal dissociation of the ammonia compounds of silver nitrate, A., 1101.
 Jonchimoglu, G. See Hintzleman, U.
 Job, A., and Cassal, A., combination of carbon monoxide with a Grignard reagent in presence of chromic chloride, A., 317.
 preparation of a chromium carbonyl through the intermediary of a magnesium compound, A., 1017.
 Job, A., and Samuel, A., oxidation complexes of nickelocyanides in presence of hydroxylamine, A., 373.
 Job, P., spectrography of potassium trihalides, A., 571.
 application of spectrographic methods to the study of complexes in solution, A., 791.
 Jobson, W. P., and Souder, H. S., continuous ore-treating furnace, (P.), B., 363.
 Jockwig, B. See Rupp, E.
 Jodidi, S. L., "formol" titration of certain amino-acids, A., 535.
 nitrogen metabolism in etiolated corn [maize] seedlings, A., 761.
 Jönsson, A., *L*-X-ray absorption spectrum of antimony, A., 214.
 Jørgensen, G., determination of sucrose in condensed milk and chocolate, B., 212.
 determination of phosphoric acid as magnesium ammonium phosphate, B., 250.
 Joffé, A., and Zechnowitzer, E., photo-electric conductivity in single crystals and in crystal aggregates, A., 224.
 Joffé, G. See Preud'homme, A.
 Joffé, J. S., and McLean, H. C., colloidal behaviour of soils and soil fertility. II. Soil complex capable of base exchange and soil acidity, B., 457.
 suction force of soils; application to the study of the soil-plant system, B., 717.
 Johansen, A. See I. G. Farbenind. A.-G.
 Johansen, E. M., and Atlantic Refining Co., desulphurising [mineral] oils, (P.), B., 701.
 Johansson, A., and Seth, R. von, carburisation and decarburisation of iron, and surface decarburisation of steel, B., 826.
 Johansson, C. H., and Linde, J. O., X-ray determination of arrangement of atoms in the gold-copper and palladium-copper mixed-crystal series, A., 112.
 John, H., [quinoline derivatives. II. Synthesis of 2-phenyl-4-β-aminoethyl-quinoline and 6-methoxy-2-phenyl-4-β-aminoethylquinoline], A., 846.
 John, H. [with Fischl, V.], quinoline derivatives. IV. Compounds of 2-phenyl-4-methoxyquinoline, A., 622.
 John, H., [with Grossmann, F.], quinoline derivatives. II. Synthesis of β-2-phenyl-4-quinolylmethamine and β-6-methoxy-2-phenyl-4-quinolylmethamine, A., 170.
 John, H., [with Grossmann, F., and Fischl, V.], quinoline derivatives. V. 4-Amino-2-phenylquinoline, A., 958.
 John, H., and Fischl, V., ingestion of nitroanthraquinone, A., 430.
 John, H., and Fischl, V., quinoline derivatives. III. Oxidation of β -alkylated quinolines, A., 525.
 John, H. J., variations in the blood-sugar content following the administration of insulin, A., 979.
 effect of potassium oxalate on blood-sugar determinations, A., 1067.
 Johns, C. O., and Standard Development Co., deodorising isopropyl alcohol, (P.), B., 898.
 Johnsen, H., and Norsk Hydro-Elektrisk Kvaestofakt., concentration of diluted nitrous gases, (P.), B., 1014.
 Johnson, A. H. See Chapman, R. N., and Harris, J. A.
 Johnson, B. M., and Carborundum Co., heat exchanger, (P.), B., 256.
 Johnson, C. H. See Garner, W. E., and Orndorff, W. R.
 Johnson, E. M., extracting volatile metal from ore, (P.), B., 984.
 Johnson, E. W., and Downey, F. P., use of aluminium hydroxide sol [in water purification], B., 723.
 Johnson, F. M. G. See Munro, L. A., and Steacie, E. W. R.
 Johnson, F. W. See Hamilton, C. S.
 Johnson, H. V., cement-lime mortars, B., 608.
 Johnson, J. A., photographic print-out paper, (P.), B., 517.
 Johnson, J. D. A., and Kon, G. A. R., three-carbon system. IX. The $\alpha\beta\beta$ -change in the β -alkylcinnamic acids, A., 1245.
 Johnson, J. M. See Voegtlin, C.
 Johnson, J. R., and McEwen, W. L., identification of monosubstituted acetylenes; derivatives of mercury diethylinyl, A., 495.
 Johnson, J. W. H., combined determination of oxygen absorbed and albuminoid ammonia in sewage and effluents, B., 726.
 modification of the Kjeldahl method for determining organo nitrogen in sewage effluents, etc., B., 806.
 Johnson, M. C., velocities of ions under radiation pressure in a stellar atmosphere and their effect in the ultra-violet continuous spectrum, A., 654.
 Johnson, M. O., manganese chlorosis of pineapples, B., 105.
 apparatus for concentrating solutions [by freezing], (P.), B., 495.
 Johnson, (Mrs.) M. R., and Johnson, R. C., intensity variations in the spectrum of neon, A., 885.
 Johnson, N. C., treatment of concrete surfaces, (P.), B., 587.
 Johnson, O., process for treating soya beans, (P.), B., 22.
 Johnson, R. C., spectra of the neutral carbon monoxide molecule, A., 334.
 energy levels of the carbon monoxide molecule, A., 777.
 Johnson, R. C., and Jenkins, H. G., nitrogen afterglow spectra, A., 991.
 Johnson, R. C. See also Johnson, (Mrs.) M. R.
 Johnson, T. B., and Coghill, R. D., pyrimidines. CIII. Discovery of 5-methylcytosine in tuberculinic acid, the nucleic acid of the tubercle bacillus, A., 75.
 Johnson, T. B. See also Houston, B., and Rugeley, E. W.
 Johnson, W., reduction of metal and making of [stainless iron and steel] alloys, (P.), B., 753.
 Johnson, W. C., pyrometer sheath, (P.), B., 648.
 Johnsrud, A. L. See Ives, H. E.
 Johnstain, (Miss) R. See Griggs, (Miss) M. A.
 Johnston, H. W. See Canadian Press-Air, Ltd.
 Johnston, J. See Andrews, D. H., Collett, A. R., and Francis, A. W.
 Johnston, J. H. S., and Peard, G. T., surface tension of gelatin solutions. II., A., 1092.
 Johnston, J. M. T., and Davies, J. E., rotary drum apparatus for drying, heating, and mixing granular and other [road-making] materials, (P.), B., 114*.
 Johnston, J. M. T. See also Gettings, S. S.
 Johnston, R. L., and Aluminium Die-Casting Corporation, [aluminium] alloy, (P.), B., 330.
 Johnston, R. L., Archer, R. S., Jeffries, Z., and Aluminum Co. of America, aluminium alloy, (P.), B., 246.
 Johnston, R. S., strain detection in mild steel by wash coating, B., 194.
 Johnston, W. See Caven, R. M.
 Johnston, W. W., production and use of sulphate in humid and arid soils as affected by cropping and sulphur treatments, B., 457.
 Jolibol, P., Lefebvre, H., and Montagne, P., decomposition of carbon dioxide under reduced pressure by spark discharge, A., 586.
 influence of the capacity of the discharge circuit on the decomposition of carbon dioxide under reduced pressure by spark discharge, A., 680.
 Jolly, V. G., and Briscoe, H. V. A., differential method for the measurement of the vapour pressure of liquids, A., 1021.
 Jones, A. J. See Cornwell, C. W.
 Jones, A. O., and Green, G. M., reaction between aluminium, iodine, ethyl alcohol and water; preparation of ethyl iodide, A., 1224.
 Jones, C. E., and General Electric Co., corrosion-resisting metal, (P.), B., 832.
 Jones, C. M., uric acid in normal and pathological plasma; relationship between free and total uric acid, A., 318.
 Jones, C. M. See also Blum, L.
 Jones, C. O., and Frost, E. C., determination of small amounts of bismuth in copper, B., 633, 671.
 Jones, D. B. See Csonka, F. A., and Murphy, J. C.
 Jones, E., method for the determination of the velocity of detonation over short lengths of explosive, B., 693.
 Jones, E. See also Morgan, G. T.
 Jones, E. C. S., and Pyman, F. L., relation between chemical constitution and pungency in acid amides, A., 60.
 Jones, F. C., treatment of rubber, (P.), B., 715*.
 Jones, G. A. See Cartrothers, W. H.
 Jones, G. G., and Lowry, T. M., dynamic isomerism. XXI. Velocity of mutation of tetramethylglucosid and of tetra-acetylglucosid in aqueous acetone, A., 481.
 Jones, G. G. See also Norrish, R. G. W.
 Jones, G. W. See Burrell, G. A., Fielder, A. C., and Sayers, R. R.
 Jones, H. A., temperature scale for tungsten, A., 892.
 Jones, J. A. See Greaves, R. H.
 Jones, J. D., and Litz, E. E., manufacturing open-hearth steel, (P.), B., 368.
 Jones, J. F. See United Water Softeners, Ltd.
 Jones, J. I. M., Wyman, B., Morton, J., and Morton Sundour Fabrics, Ltd., dyes and dyeing; [preparation of derivatives of leuco-compounds of vat dyestuffs], (P.), B., 236.
 dyes and dyeing, (P.), B., 403.
 Jones, J. I. M. See also Morton, J.
 Jones, J. J., continuous tin plate furnaces, (P.), B., 1018*.
 Jones, J. K. A., and Swift & Co., food product, (P.), B., 993.
 Jones, L. A., contrast of photographic printing paper, B., 996.
 Jones, L. A., and Hall, V. C., relation between time and intensity in photographic exposure, IV., B., 1030.
 Jones, L. A., Huse, E., and Hall, V. C., relation between time and intensity in photographic exposure, III., B., 566.
 Jones, L. A., and Sandvik, O., spectral distribution of sensitivity of photographic materials, A., 694.
 Jones, L. D., and Ayres, A. U., centrifugal machine and process, (P.), B., 473*.
 Jones, L. D., and Sharples Specialty Co., avoiding shock chill in precipitating substances [wax] from liquids [petroleum], (P.), B., 40.
 securing temporary intimate contact [without emulsification] between immiscible liquids, (P.), B., 397.
 Jones, L. D. See also Sharples Specialty Co.
 Jones, L. W., and Burns, G. R., trihydroxytrilethylamine oxide and substituted hydroxylamines with hydroxyethyl radicals, A., 155.
 Jones, L. W., and Root, F. B., rearrangement of hydroxamic acids isomeric with triphenylacetylhydroxamic acid, A., 280.
 Jones, L. W., and Wallis, E. S., Beckmann rearrangement involving optically active radicals, A., 279.
 Jones, M. D., and Fuller Fuel Co., drying materials [coal with waste furnace gases], (P.), B., 349.
 Jones, M. D. See also Fuller Fuel Co.
 Jones, M. M. See Duley, F. L.
 Jones, (Miss) P., and Jones, T. J., effect of a magnetic field on the electrical resistance of mercury and some amalgams, A., 783.
 Jones, R. C. See Griscom-Russell Co.
 Jones, R. E., baking powder, (P.), B., 74.
 Jones, R. M. See Ross, W. H.
 Jones, T. G. H., and Smith, F. B., olefinic terpene ketones from the volatile oil of flowering *Tagetes glandulifera*, I., A., 72.
 Jones, T. J. See Jones, (Miss) P.
 Jones, W. J. See Bonnell, D. G. R.
 Jones, W. N., [selective action of polarised light on starch grains], A., 135.
 Jones, W. R. D. See Cook, W. T.
 Joos, G., interpretation from the correspondence principle of the spontaneous appearance of spectral lines of the type $ms-md$, A., 106.
 nature of the chemical linking; structure of silicon tetrachloride, A., 111.
 Joos, G., and Hüttig, G. F., hydrogen. III. Electro-affinity of hydrogen, A., 686, 803.
 electron affinity of the hydrogen atom, A., 1189.
 Joos, G. See also Angerer, E. von.
 Jordan, C. N. See Ralls, J. O.
 Jordan, E., and L'Air Liquide, Société Anonyme, separation of gaseous mixtures by liquefaction and rectification, (P.), B., 256*.
 Jordan, E., softening aluminium-plated iron articles, (P.), B., 64*.
 Jordan, H. See Chemische Fabrik auf Aktien vorm. E. Schering.
 Jordan, H. E. See Dunham, H. G.
 Jordan, L., and Eckman, J. R., gases in metals. II. Determination of oxygen and hydrogen in metals by fusion in vacuum, B., 94.
 Jordan, L., Peterson, A. A., and Phelps, L. H., refractories for melting pure metals: iron, nickel, platinum, B., 951.
 Jordan, L. A., tanning of leather, (P.), B., 101.
 Jordan, P. See Helsingberg, W.

Jores, H. See Freundlich, H.
 Joret, G., and Radet, E., detection of leather in fertilisers made from waste products, B., 505.
 Jorissen, W. P., influence of inflammable and other gases on the explosibility limits of mixtures of gas and air. XI. Graphical representation, A., 32*. reaction regions, A., 246, 359*, 1100. reaction regions [composition of explosive mixtures], A., 906.
 Jorissen, W. P., and Beek, P. A. van der, oxidation of benzaldehyde and the activation of oxygen by benzaldehyde, A., 519.
 Jorissen, W. P., and Ongkiehong, B. L., explosion regions. VIII. Explosion range of hydrogen-ammonia-air and hydrogen-ammonia-oxygen mixtures, A., 359.
 explosion regions. IX. Explosion space EtBr-NH₂-O₂-N₂, A., 630. explosion regions. VII. Influence of ethylene on the explosion limits of detonating [oxyhydrogen] gas, B., 179. reaction regions. X. Fe-SiO₂, Fe-Mg-S, and Fe-Al-S, A., 909. reaction regions. XI. Explosion regions nitrous oxide-ether vapour-oxygen and nitrous oxide-ether vapour-air, A., 1206.
 Jorpes, E., Euler, H. von, and Nilsson, R., co-zymase. VIII., A., 868.
 Jorpes, E. See also Euler, H. von.
 Joseph, A. F., action of silica on electrolytes, A., 132.
 Joseph, A. F., and Oakley, H. B., action of silica on electrolytes. II., A., 132. anomalous flocculation of clay, A., 576.
 Joseph, T. L., Royster, P. H., and Kinney, S. P., effect of the physical properties of ore and coke on the capacity of the blast furnace, B., 409.
 Josephson, K., affinity relationships of invertases. V. Specificity of invertase and raffinase, A., 94. enzymes of emulsion. I. Amylase action of emulsin preparations, A., 321. enzymes of emulsion. II., A., 640. affinity of invertase for different sugars. IV., A., 865. applicability of law of mass action to enzymic sugar and glucose cleavage, A., 1174.
 Josephson, K. See also Euler, H. von.
 Josephy, B. See Ruff, O.
 Josi, S. E. See Thatcher, H. S.
 Joss, E. J., action of metals on nitric acid, A., 1110.
 Jostes, F. See Braun, J. von.
 Jouguet, E., reaction velocity and thermodynamics, A., 362, 913.
 Joumiaux, A., influence of temperature on the mol. wt. of copper, A., 116. quantitative relationship between the mol. wt. of metals and their density in the liquid state, A., 116. temperature variation of the molecular weights of elements, A., 461.
 Jourdan, F., and Gall, J., manufacture of carbon monoxide, (P.), B., 584. manufacture of hydrogen, (P.), B., 584.
 Joyce, A. W., and Chemical Foundation, Inc., vat dyes of the thioindigo series, (P.), B., 265.
 Judd, D. B., computation of colorimetric purity, B., 790*.
 Judentic, V. See Milbauer, J.
 Juer, G., and Tubize Artificial Silk Co. of America, nitrating cellulose, (P.), B., 110.
 Juer, G. See also Bindschedler, E.
 Jurgens, J., mercuration of nitrobenzene, A., 312.
 Jürges, E., exchangeable furnace arch, (P.), B., 1000*.
 Julien, H. L., drying of textile and similar materials, (P.), B., 269*. Julius, (Mlle.) A. See Böeseken, J.
 Juliusberger, F. See Pineusen, L.
 Julian, I. A., electric furnace for effecting reactions between solids or liquids and gases, (P.), B., 19.
 Julian, M. A., making sheet copper electrolytically, (P.), B., 134*.
 Jung, A., production of press-matrix iron in the converter, B., 56.
 Jung, G., influence of optical properties on the measurement of the thickness of tarnish films [on metals], A., 336. fine structure of surface films; influence of temperature on the surface tension of pure dielectric liquids, A., 1094.
 Jung, G. See also Bodenstein, M.
 Jungblut, C., determination of ammonia in ammoniacal and industrial liquors, B., 319.
 Jungblut, H., and Gummert, H., influence of the casting temperature and of annealing on the magnitude and distribution of the phosphate eutectic [in cast iron], B., 588.
 Jungermann, C. See Sabatitschka, T.
 Junghunz, R. See Fritzker, J.
 Junker, G., process for de-oxidation, and for the protection from oxidation, of metals [during] melting, (P.), B., 133.
 Jura Oelschleifer-Werke A.-G., obtaining oils from oil shales, (P.), B., 147.
 Jura Oelschleifer-Werke A.-G., and Nagel, K., distillation of bituminous material of low calorific value, such as shale, (P.), B., 861.
 Jurany, H. See Koenigs, E.
 Juretzka, F., condensing apparatus in connexion with an electric furnace for the production of volatile metals, (P.), B., 675*.
 Jurrisen, A., and Simplex Refining Co., method of using concentrated decolorising clays for refining lubricating oils, (P.), B., 701.
 Juschkevitsch, N. F., extraction of copper from burnt pyrites by means of sulphuric acid, B., 94.
 Just, A., and General Electric Co., manufacturing ductile tungsten, (P.), B., 549*.
 Just, R. See Badische Anilin- & Soda-Fabrik.
 Just, R. See Traube, W.
 Justin-Mueller, E., cochineal and kermes, A., 840.

K.

K.D.P., Ltd., manufacture of rubber, (P.), B., 598. concentrating caoutchouc latex, etc., (P.), B., 956.
 Kabellk, J., nephelometry of serum, A., 22.
 Kadenactwna, M. See Hlasko, M.
 Kadow, W. See Wohl, K.
 Kahler, H. See Halberkann, J.
 Kämmerer, H., and Weisbecker, H., sensitisation by porphyrins, especially by putrefaction porphyrin, with respect to light rays and X-rays, A., 431.
 Kämmerer, H. See also Badische Anilin- & Soda-Fabrik.
 Kaemmerling, G. H., Benner, H. W., and Fuller-Lehigh Co., manufacture of gas, (P.), B., 624*.
 Kaemmerling, G. H. See also Fuller Fuel Co.
 Kampf, A., manufacture of fibres, tape, etc., from viscose, (P.), B., 401. treating viscose silk in a vacuum, (P.), B., 436*.
 Kämpf, A. See also Faust, O.
 Kaez, S. See Hamburger, R.
 Kafuku, K., and Hata, C., utilisation of unripe fallen "ponkan" fruits, B., 768.
 Kahane, E., determination of sulphur in vulcanised rubber, B., 639.
 Kahlenberg, L., separation of crystalloids from one another by dialysis, A., 349.
 Kahlenberg, L. See also Royce, H. D., and Steinle, J. V.
 Kahler, H. See Barrensheen, H. K.
 Kahn, B. S. See Roe, J. H.
 Kahn, G., and Stokes, J., jun., comparison of electrometric and colorimetric methods for determination of p_{H_2} of gastric contents, A., 1068.
 Kahn, M., Le Breton, E., and Schaefer, G., products useful in tanning and tawing, (P.), B., 557.
 Kahn, M., and Société Française des Produits Alimentaires Azotés, manufacture of albumins and fatty matters, (P.), B., 297*.
 Kahn, M. C., hydrogen sulphide production by anaerobic spore-bearing bacteria, A., 436.
 Kahn, H., antagonistic action of alkaline-earth ions on plant plasma. VII., A., 438. effect of temperature on the coagulating action of alkali salts on plant plasma, A., 438.
 Kaiser, C. T., experiences in the operation of the new municipal water-softening plant at Newark, Ohio, B., 342.
 Kaiser, H. E. See Hercules Powder Co.
 Kaidi, L., absorption of light by haematoxylin, III., A., 108.
 Kalb, L., and Gross, O., preparation of aldehydes by oxidation of primary acid hydrazides, A., 614.
 Kalb, L., Schweizer, F., and Schimpf, G., preparation of indole-3-propionic acid, A., 1181.
 Kalb, L., Schweizer, F., Zellner, H., and Berthold, E., substituted indole-2-carboxylic-3-propionic acids and some iodo-derivatives of benzene, A., 1152.
 Kali-Forschungs-Anstalt G.m.b.H., preparation of theardite from sodium chloride and magnesium sulphate, (P.), B., 360.
 Kali-Forschungs-Anstalt G.m.b.H., and Ritter, E., cooling hot salt solutions in a vacuum, (P.), B., 808.
 Kali-Ind. A.-G., and Ratig, direct transformation of kieserite into solid Epsom salts without heating, (P.), B., 783.
 Kalinin, K., trials with powdered phosphite on different soils, B., 416.
 Kalinov, N. See Lipp, P.
 Kalischer, G., Müller, R., and Frister, F., production of benzanthrone derivatives, (P.), B., 735.
 Kalischer, G. See also Cassella & Co., L.
 Kalk, H., and Kugelmann, B., titration, determination of hydrogen-ion concentration, and "titration of indicators" in gastric juice, A., 764.
 Kalle, R. See Bierlich, R.
 Kalle & Co., A.-G., [manufacture of] sulphur dyestuffs fast to chlorine, (P.), B., 149.
 [manufacture of] vat dyestuffs, (P.), B., 149, 355*. development of images from diazo-compounds and components capable of coupling, (P.), B., 300. producing sulphur dyestuffs fast to chlorine, (P.), B., 355*. process for separating enzymes from their solutions, (P.), B., 804.
 Kalle & Co., A.-G., Luck, K., and Zahn, R., dyeing leather, (P.), B., 11.
 Kalle & Co., A.-G., Schmidt, M., and Neugebauer, W., production of vat [perylene] dyestuffs, (P.), B., 7.
 Kalle & Co., A.-G., and Spröngerts, E., purification of thionyl-p-azo-o-aminotoluene, (P.), B., 772. preparation of carbamic esters, (P.), B., 901.
 Kalle & Co., A.-G. See also Altgelt, H.
 Kallen, H. See Houdremont, E.
 Kalling, B. M. S. See Daniell, S. D.
 Kallmann, H., and Bredig, M., ionisation of hydrogen by slow electrons, A., 104.
 Kallmann, H., and Mark, H., properties of Compton radiation, A., 551.
 Kallmann, H. See also Franz, H.
 Kalmus, Comstock, & Wescott, treatment of ores or materials containing oxide of iron for recovering such oxide, (P.), B., 756.
 Kalmus, Comstock, & Wescott. See also Wall, E. J.
 Kalning, H., determination of the degree of milling of flour in bread, B., 563.
 Kalsing, H. See Tammann, G.
 Kaltenbach, M., concentration of nitric acid, (P.), B., 236.
 Kaltwasser, O. See Akt.-Ges. I. Anilin-Fab.
 Kalvarjiski, B. E., agglutination of spermatozoa by chemical reagents, A., 540.
 Kam, E. J. van der, replaceability of the halogen atom in 2-chloro- and 2-bromo 1:6:8-trinitronaphthalene, A., 1029. substitution of the halogen atom or alkylxy-radical in 2-chloro-(2-bromo-) and 2-methoxy-(2-ethoxy-) 1:6:8-trinitronaphthalene and in 1-chloro-2:4-dinitrobenzene by amino-residues and other groups or atoms, A., 1239. relation between m. p. and chemical constitution, A., 1240.
 Kampl, E. See Rupe, H.
 Kamomey, N. See Azuma, R.
 Kam, I., changes in strength and elongation of artificial silk caused by moisture, B., 944.
 Kanieffski, B., hydrogen absorption by sodium and calcium, A., 809.
 Kamm, B. See Hansen, F.
 Kamm, E. D. See Hellbron, I. M.
 Kammerer, V., combustion of volatile matter in [boiler] furnaces with mechanical grates, B., 569.
 Kampf, F., new conductivity effect by the simultaneous action of blue and red light and a case of more than proportional increase in conductivity with light intensity at low temperatures, A., 891.
 Kamura, H., reduction of ferric oxide by hydrogen, A., 259*. reduction of ferric oxide and iron ores by hydrogen, B., 131*. Kanamori, T., O:N ratio in phloridzinised dogs, A., 642. behaviour of the urinary O:N ratio in phenylhydrazine-anæmia, A., 1169. influence of diets rich in vitamins and poor in minerals on metabolism and on the urinary O:N ratio, A., 1180.
 Kaneko, S. See Ogawa, W.
 Kanga, D. D., Ayyar, P. R., and Simonsen, J. L., conessine, A., 1047.
 Kanitz, A., direct reading off of p_{H_2} by a compensatory potentiometric method, A., 374.
 Kann, E. See Bergmann, M.
 Kanner, O., refractometric investigation of the breakdown of the protein of foetal organs, A., 752.

Kano, Y., and Yamaguti, B., contents of helium and other constituents in the natural gases of Japan, A., 933.

Kano, Y. See also Yamaguchi, B.

Kanolt, C. W., non-inflammable liquids for cryostats, A., 707.

Kansas City Gasoline Co. See Wellman, F. E.

Kao, C. H. See Lehrer, V.

Kao, S. See Chikashige, M.

Kapeller, R., methylguanidino picrate, A., 943.

Kapeller, R. See also Fromm, E.

Kaplansky, S., autolysis of animal organs at the ordinary temperature, A., 542. muscle extractives. XXV. Absence of β -alanine in the degradation products of muscle proteins, A., 1167.

Kappanna, A. N., ionisation potential of hydrogen fluoride, A., 661.

Kappanna, A. N. See also Ghosh, J. C.

Kappen, H., and Beling, R. W., quinhydrone method [for determination of reaction of soils] with reference to different forms of soil acidity, B., 1024.

Kapuscinski, W., line fluorescence of cadmium vapour, A., 10.

Kar, K. C., kinetic theory of compressibility of solutions and binary liquid mixtures. II., A., 118.

Karafat, J., bearing metal, (P.), B., 197.

Karanassis, T., stannous chloroiodide, bromoiodide, and chlorobromide, A., 255. complex stannous iodides, A., 276.

double decomposition between the halides of tin, arsenic, antimony, bismuth, silicon, and titanium, A., 487.

double decomposition between the halides of phosphorus, tin, arsenic, antimony, lead, bismuth, silicon, titanium, zirconium, and thorium, A., 812.

Karasawa, R., formation of deoxybilanic acid from bilanic acid and of deoxy-cholyl (7 deoxybilanic) and trideoxybilanic acids from bilobilanic and deoxy-cholic acids, A., 401.

Karavayev, N. L., and Palkine, A. P., inversion and saccharification of beet diffusion juice, B., 602.

Karczag, L., electrolysis. IX., A., 797.

Karczag, L., Macleod, J. J. R., and Orr, M. D., albino rat in insulin standardisation; normal blood-sugar and glycogen content of the liver and muscles, A., 1180.

Karczag, L., and Roboz, P., kinetic phenomena at liquid surfaces, A., 120.

Karin, A. See Finch, G. L.

Karitzky, F. W., and Newhall, H. B., alloy, (P.), B., 63.

Karlborg, R., utilising the condensate from indirectly-heated sulphite-cellulose boilers, (P.), B., 316.

Karlsson, S. See Euler, H. von.

Karns, G. M., modified gas volume-meter for the determination of densities of solids, A., 707.

test for cadmium in presence of copper, A., 1116.

Kárpáti, E., process for working up tar-oil fractions with a high creosote content, B., 42.

obtaining useful products by the oxidation under pressure of lignite-tar creosote, B., 310.

obtaining camomile oil, B., 803.

Karpen, N. V., diffusion; free path of water molecules; influence of a field of force; statistical equilibrium, A., 124.

Karpen & Bros., S., producing chloro-derivatives of methane, (P.), B., 253.

manufacture of methylals, (P.), B., 386*.

manufacture of [resinous] phenolic condensation products, (P.), B., 502*, 761*.

production and separation of hexamethylenetetramine and ammonium chloride, (P.), B., 614*.

separation of hexamethylenetetramine from ammonium chloride, (P.), B., 614*.

manufacture of hexamethylenetetramine, (P.), B., 616*.

Karpfen & Bros., S. See also Carter, C. B.

Karpinsky, S., and Anderson, J. S., separating device operating by centrifugal force, (P.), B., 473*.

Karpplus, H., improving artificial silk, staple fibres, and textiles made therewith, (P.), B., 708*.

Karpplus, H. See also Bechhold, H.

Karr, W. G. See Du Vigneaud, V., and Oser, B. L.

Karrer, P., configuration of d-queritol, A., 398.

relationship between the [physical] structure of artificial silks and their resistance to attack by enzymes, B., 481.

Karrer, P., and Benz, P., resolution of glycerol- α -phosphoric acid. I. and II., A., 383, 388.

Karrer, P., and Ehrenstein, M., naturally occurring amino-acids, A., 603.

Karrer, P., Escher, K., and Widmer, R., configuration of d-glutamic acid, d-ornithine, and d-lysine, A., 505.

Karrer, P., Gehrkens, K. A., and Heuss, W., constitution and configuration of pivalic and valeric acids, A., 725.

Karrer, P., and Lier, H., *Gypsophila* sapogenin. II., A., 401.

Karrer, P., and Lieser, T., polysaccharides. XXXIV. Hydro- and oxy-celluloses, B., 267.

Karrer, P., and Miyamichi, E., conversion of a β -amino-acid into a metoxazine derivative, A., 530.

Karrer, P., and Salomon, H., glycerol-phosphoric acids from lecithin, A., 384.

Karrer, P., and Schubert, P., polysaccharides. XXXV. Enzymic degradation of artificial silk and natural cellulose, B., 945.

Karrer, P., Schubert, P., and Wehrli, W., polysaccharides. XXXIII. Enzymic cleavage of artificial silk and natural cellulose, B., 44.

Karrer, P., and Takahashi, T., nicotones, A., 626.

Karrer, P., and Tschan, M., degradation of β -methylcellulobioside into β -methyl-glucoside, A., 823.

Karrer, P., and Wehrli, W., amidation of cotton, B., 659.

Karrer, P., and Widmer, A., derivatives of dihydronicotine, A., 627.

exhaustive chromic acid oxidation of hydrogenated cyclic bases, A., 1150.

Karschulín, M. See Plotnikov, J.

Karsen, A. See Bijvoet, J. M.

Karsten-Salmony, stabilisation of hydrogen peroxide solutions and of perborates, B., 537.

Karström, H. See Virtanen, A. I.

Kartashov, V., dyeing of cellulose acetate silk. I. and II., B., 49, 188.

Karzhev, V. A. See Yushkevich, N. F.

Kasarnovski, A., photosensitivity of selenium. I., A., 1013.

Kasarnovski, J., electron affinity of hydrogen, A., 876.

Kast, T., structural diagrams of some special steels, B., 92.

Widmannstätten structure in iron-carbon and iron-nickel alloys and in meteorites, B., 277.

distribution of hardness in quenched carbon steels, and quenching cracks, B., 920.

Kasivagi, I., action of sodamide on some organic compounds, A., 728.

derivatives of furfuraldehyde. I. Condensation of furfuraldehyde with aliphatic ketones, A., 842.

derivatives of furfuraldehyde. II. Spectrographic study of furyl ketones, A., 1149.

Kasper, E. See Meyer, Julius.

Kassirsky, A., chlorides of the blood in different conditions of the gastric secretion, A., 752.

Kast, H., and Selle, H., detection and colorimetric determination of carbon monoxide, A., 1018.

supposed water of crystallisation of mercury fulminate, A., 1129.

Kast, W., Born's dipole theory of anisotropic liquids, A., 779, 1194.

Kasten, E. See Pringsheim, H.

Kastler, A., pollucite, A., 709.

Kataoka, S. See Weimarn, P. P. von.

Katagiri, H., influence of fatty acids and their salts on alcoholic fermentation by living yeast. I. Acetic and formic acids and their sodium, potassium, and ammonium salts, A., 642.

Kataoka, T., anthocyanin pigments of "morning glory." I., A., 1150.

Katayama, M., simple derivation of the Planck-Einstein formula, A., 881.

Kather, K. See Ulrich, F.

Kato, J., injection [colloidal magnesium] for haemorrhoids, (P.), B., 219*.

Kato, S. See Wada, I.

Katsch, (Fr.) A., method of demonstration of phenomena in discharge tubes, A., 959.

Katscher, E. See Lustig, O.

Katschinka, H. See Weissenberger, G.

Katsu, Y., influence of temperature on the electrode potential of the dechlorination calomel electrode, A., 1105.

Katti, M. C. T. See Beal, G.-D.

Kattner, R., and Frankensteiner Magnesitwerke A.-G., briquetting fuels, (P.), B., 479.

Kattner, R. See also Frankensteiner Magnesitwerke A.-G.

Kattwinkel, R., examination and evaluation of coking coals, B., 257, 905.

thickening of benzol wash-oil. III. Valuation of benzol wash-oil in coking practice, B., 570.

Katz, J. R., formation of an alkali-cellulose compound in an aqueous-alcoholic medium, A., 468.

comparison of the heat effect of the swelling and mercerisation of cellulose with absorption and X-ray spectrographic experiments, A., 793.

Katz, J. R., and Gerngross, O., cleavage of strongly stretched gelatin, A., 793.

Katz, J. R., and Hess, K., swelling and mercerisation of natural cellulose fibres in nitric acid, and "philanised" cotton. I. X-Ray spectrography, B., 737.

Katz, J. R. See also Gerngross, O.

Katz, L. N., Kerridge, (Mits) P. M. T., and Long, C. N. H., lactic acid in mammalian cardiac muscle. III. Changes in hydrogen-ion concentration, A., 90.

Katz, L. N., and Long, C. N. H., lactic acid in mammalian cardiac muscle. I. The stimulation maximum, A., 89.

Katz, L. N. See also Hines, H. J. G.

Katz, S. H., quantitative determination of gases [carbon monoxide], (P.), B., 430.

Katz, S. H., Smith, G. W., and Myers, W. M., determinations of air dustiness with the sugar tube, Palmer apparatus, and impinger, compared with determinations with the konimeter, B., 726.

Katz, S. H. See also Sayers, R. R.

Katz, W. See Löwenstein, A.

Kauls, O. See Gewerkschaft Wallram Abt. Metallwerke.

Kaufmann, H. L., and Producers and Refiners Corporation, purifying and decolorising agents for oils, (P.), B., 575.

Kaufmann, H., oxycellulose, B., 267.

action of light on cotton, B., 817.

Kaufmann-Cosla, O., and Leibowitz, J., determination of carbon in urine and dilute aqueous solutions, A., 327.

Kaufmann-Cosla, O., and Roche, J., action of insulin on the disappearance of dextrose and oxidations in blood *in vitro*, A., 1063.

biological value of the carbon of different proteins, A., 1170.

Kaufler, F. See Hörmann, L., and Wacker, A., Ges. f. elektrochem. Ind. m. b. H.

Kaufman, L. E., chemical composition of tschekkinite, A., 266.

Kaufman, E., micro-determination of blood-sugar by Hagedorn and Jensen's method, A., 327.

interferometric application of the Abderhalden reaction and interferometric analysis of fermentative processes, A., 1268.

Kaufmann, H. P., free thiocyanogen and its application in volumetric analysis; new criterion for fats and oils, B., 165.

bromometric examination of fats, B., 447.

use of thiocyanogen in fat analysis, B., 147.

determination of the composition of wood [tung] oils with help of the thiocyanogen value, B., 758.

Kaufmann, H. P., and Kögl, F., quadrivalent lead salts of the pseudohalogens, A., 369.

Kaufmann, H. P., and Oehring, W., introduction of the thiocyanato-group into organic compounds, A., 392.

Kaufmann, O. See Siemens-Schuckertwerke G.m.b.H.

Kauf, L., and Haberer, E., bearing metal, (P.), B., 134.

Kaunert, P., humic substances in lignite, B., 858.

Kaup, E. See Glöcker, R.

Kautsky, H., chemiluminescence, A., 555*.

six-membered silicon compounds, A., 924.

Kautsky, H., and Thiele, H., preparation of oxygen-free nitrogen, A., 699.

Kautter, T. See Gutbier, A.

Kawahara, M., and Peczenik, O., determination of pepsin using Congo-red, A., 1060.

Kawahara, M. See also Peczenik, O.

Kawai, J. See Ruby, C. E.

Kawai, S., reaction between triacetin and phenol; preparation of triacetin, A., 281.

Kawai, S., preparation of pyrocatechol- α -carboxylic acid; condensation of pyrocatechol with glycerol, A., 290.
synthesis of the simplest homologue of urushiol, A., 609.

Kawai, S. See also Michaelis, L.

Kawakami, K., process for manufacturing a lead accumulator, (P.), B., 332*.

Kawakami, M., determination of the heat of precipitation of cementite from α - and β -martensites, B., 325.
specific heat of iron-nickel alloys, B., 671.

Kawakami, Y., properties of sodium naphthenate used in soap industry, B., 637.

Kawakibi, S. See Kohn-Abrest, E.

Kawana, K., adsorption by humic acid, A., 1201.

Kawenoki, F. See Weissenberger, G.

Kawenoki, (Mle.) G. See Jabłczyński, K.

Kawenoki, (Mle.) J. See Jabłczyński, K.

Kay, H. D., variation in the end-products of bacterial fermentation resulting from increased combined oxygen in the substrate, A., 643.
kidney phosphatase, A., 977.

Kay, H. D. See also Irving, J. T., and Rimington, C.

Kaya, S., solidus line in the iron-carbon system, B., 325.

Kaya, S. See also Honda, K.

Kaye, F., manufacture of moulded or pressed goods from fibrous materials, (P.), B., 1010*.

Kaye, G. W. C., all-metal mercury-vapour pump, A., 377.

Kaye, M., and Marriott, R. H., behaviour of sharpened limes in unhauling, B., 249.

Kayko, C. J., and General Electric Co., Ltd., electrode for discharge tubes, (P.), B., 19*.

Kayser, E., influence of after-treatments on the fastness to light of dyeings obtained by means of Naphthol AS compounds, B., 784.

Kayser, E. See also Chem. Fahr. Griesheim-Elektron.

Kayser, L., determination of the ash content of raw sugar by the electrical conductivity method, B., 685.

Kazda, C. B., photo-electric threshold for mercury, A., 3.

Kazemer, C., producing an alloy of copper, (P.), B., 163.

Keach, D. T., and Hill, A. J., acetophenonyl (phenacyl) derivatives of barbituric acid, A., 1250.

Keach, D. T. See also Hill, A. J.

Kean, R. H. See Adams, F. W., and Haslam, R. T.

Keay, H. O., abrasive cement, (P.), B., 1015.

Keefer, C. E., heat-drying of [sewage] sludge, B., 469.

Keeler, H. R. See Culen, G. E.

Keeler, L. J., and American Magnesium Corporation, protective coating for magnesium, (P.), B., 369.

Keeley, T. C. See Lindemann, F. A.

Keen, A. W. See Coffin, J. G.

Keen, B. A., Crowther, E. M., and Coutts, J. R. H., evaporation of water from soil, B., 292.

Keenan, G. L., substances which affect photographic plates in the dark, A., 808.

Keenan, G. T., optical properties of some sugars, A., 1194.

Keenan, W. See British Thomson-Houston Co., Ltd.

Keeser, E., antiseptic activity of mercury salts, A., 864.

Keeser, E., and Keeser, J., tolerance to arsenic, A., 92.

Keeser, I., pharmacology of germanium compounds, A., 864.

Keeser, J. See Keeser, E.

Keesom, W. H., solid helium, A., 893.
fusion curve of helium, A., 893.

Keesom, W. H., Agt. F. P. G. A. J. van, and Jansen, (Miss) A. F. J., thermal expansion of copper between $+101^\circ$ and $+253^\circ$, A., 1197.

Keesom, W. H., and Onnes, H. K., international low-temperature scale, A., 893.

Keesom, W. H. See also Nijhoff, G. P., Urk, A. T. van, Vorländer, D., and Werner, W.

Kegg, J. P., process of making acid-proof alloys, (P.), B., 674.

Kehrmann, F., and Baumgarten, E., acetylation of diphenylamine derivatives with acetic anhydride and zinc chloride, A., 829.

Kehrmann, F., and Borgeaud, P., visible absorption spectra of several azoxine colouring matters, A., 1080.

Kehrmann, F., and Brunner, F., coloured derivatives of tetraphenylmethane. VI. Carbazones, A., 526.
coloured derivatives of tetraphenylmethane. VII. Attempted synthesis of carbazine derivatives of naphthalene, A., 607.

Kehrmann, F., Goldstein, H., and Brunner, F., coloured derivatives of tetraphenylmethane. VIII. Relation of fluorescence and of solution-colour of the aminocarbazones in different colourless solvents to other optical properties of the latter, A., 553.

Kehrmann, F., Grillet, E., and Borgeaud, P., synthesis of azoxine colouring matters, A., 1202.

Kehrmann, F., and Poehl, N., derivatives of α -benzoquinone, A., 728.

Kehrmann, F., and Rieder, M., oxonium derivatives of benzopyran, A., 732.

Kehrmann, F., and Sterchi, M., oximes of amino- and hydroxy-benzoquinones, A., 1140.

Kehrmann, F., Tschudi, P., and Tschui, J., coloured derivatives of tetraphenylmethane. IX. Derivatives of diphenylcarbazine, A., 526.

Keldei, E. See Wagner, H.

Kell, W., germanium and gallium from germanite, A., 689.
diamino-acids of the shield of *Chelidone imbricata*, A., 1168.

Kellin, D., comparative study of turacin and haematin and its bearing on cytochrome, A., 857.

Keilling, J. See Guittonean, G.

Keiser, E. H. See De Groot, M.

Keiser, K., oxidisability of water as measured by the Kibel-Tiemann method and the determination of the "chlorine number," B., 222.

Keitel, K., influence of experimental poisoning by acids and of excision of the suprarenals on the inorganic cation content of blood-serum, A., 1068.

Keitel, K. See also Borgert, H.

Keith, E. W., and General Metals Recovery Co., purifying gas-house liquor, (P.), B., 430.

Keith, G. See Keith, J., & Blackman Co., Ltd.

Keith, H. R. See Kendall, A. I.

Keith, J., & Blackman Co., Ltd., and Keith, G., centrifugal apparatus for dust separation [from gases], (P.), B., 904*.

Keler, H. von. See Farbenfabr. vorm. F. Bayer & Co.

Keller, A., pulveriser mill, (P.), B., 520.

Keller, A. See also Ziefelstorf, H.

Keller, C. H. See Minerals Separation, Ltd.

Keller, H., screens for colour photography, (P.), B., 173.

Keller, K. See Cassella & Co., L., and Giudu, W.

Keller, O., and Schulz, G., derivatives (esters and sulphonate acids) of anthranilic and methylanthranilic acids, A., 63.

Keller, R., colloid charge, A., 351.

Keller, R. See also Fürth, R.

Kellermann, K. See Birkenbach, L.

Kellett, R. E. See Morgan, G. T.

Kelley, G. L., and Budd, E. G., Manufacturing Co., treating metals to inhibit excessive grain growth, (P.), B., 496*.

Kelley, G. L., and Winlock, J., restraint of exaggerated grain growth in critically strained metal, B., 195.

Kelley, K. K., thermodynamic consideration of the synthetic methanol [methyl alcohol] process, B., 214.

Kelley, K. K. See also Parks, G. S.

Kelley, W. P., and Brown, S. M., base exchange in relation to alkali soils, B., 206.
ion exchange in relation to soil acidity, B., 601.

Kelley, W. V. D., Tronolone, D., and Kelley Color Laboratory, Inc., colour photography, (P.), B., 29*.

Kelley Color Laboratory, Inc. See Kelley, W. V. D.

Kellner, H. M., conditions for satisfactory photographic spectrophotometry, A., 483.
influence of strong heating on the properties of photographic dry plates, B., 387.

photographic photometry with intermittent exposure from the standpoint of a new blackening law, B., 467.

Kellner, H. M. See also Schaum, K.

Kellogg, J. L., and Kellogg Co., manufacture of bran food, (P.), B., 106.

Kellogg Co. See Kellogg, J. L.

Kelly, A., acid-proof and like containers, (P.), B., 178*.

Kelly, A. and Borax Consolidated, Ltd., treating boron-containing minerals, (P.), B., 666*.

Kelly, M. W. See Thomas, A. W.

Kelly, T. D., electrolysis or the splitting up of air or water, (P.), B., 592.

Kelly Springfield Tire Co. See Hardman, A. F.

Kelvinator Corporation. See Dever, W. C.

Kemble, E. C., intensities of band lines, A., 223.
energy required to split hydrogen chloride [molecule] into atomic ions, A., 224.

Kemble, E. C., and Bourgin, D. G., relative intensities of band lines in the infrared spectrum of a diatomic gas, A., 658.

Kemble, E. C., and Witmer, E. E., interpretation of Wood's iodine resonance spectrum, A., 1191.

Kemet Laboratories Co. See Cooper, H. S.

Kemmerer, G., and Schrenk, H. H., mercuric bromide paper for the Gutzeit method for arsenic, A., 928.

Kemp, C. N., application of X-rays to the laboratory jig-testing of coal, B., 937.

Kemzura, A. J. See Gregor, W. D.

Kendall, A. I., bacterial metabolism. LXXXIII. Non-dextrose-fermenting bacteria and insulin, A., 868.

Kendall, A. I., Day, A. A., and Walker, A. W., bacterial metabolism. LXXVII. Intestinal flora of nurslings. LXXVIII. Intestinal bacteria of artificially fed infants. LXXIX. Intestinal flora of normal adults. LXXX. Intestinal flora of man containing abnormal numbers of gas bacilli, A., 1062.

Kendall, A. I., and Ishikawa, M., bacterial metabolism. LXXIV. Effect of insulin on cultures of *Bacillus bulgaricus* and *B. acidophilus*. LXXV. Effect of insulin on bacterial metabolism, A., 868.

Kendall, A. I., and Keith, H. R., bacterial metabolism. LXXVI. Soluble proteolytic enzyme of *Bacillus proteus*, A., 1062.

Kendall, E. C., and Nord, F. F., reversible oxidation-reduction systems of cysteine-cystine and reduced and oxidised glutathione, A., 1129.

Kendall, E. C., and Ort, J. M., oxidation-reduction potentials of 2-ketodihydroindole-3- β -propionic acid and its halogen derivatives, A., 912.

Kendall, E. C., Osterberg, A. E., and MacKenzie, B. F., preparation of 2-ketodihydro- and 2-ketoheydroxy-indole-3-propionic acids and some of their halogen derivatives; thyroid activity, V., A., 734.

Kendall, F. E., and Noyes, W. A., optically active diazo-compounds. III. Crystalline, acyclic diazo-ester, A., 1134.

Kendall, J., and West, W., attempted separation of hafnium and zirconium by the ionic migration method, A., 1117.

Kendall, S. W., proofing cellulosic, animal, and other substances against insects, (P.), B., 314.

Kennard, E. H., interaction of radiation with matter; fluorescence exciting power, A., 1191.

Kennedy, C., and Palmer, L. S., hydrogenated vegetable oil as a source of vitamin-E, A., 645.

Kennedy, J., blast furnace, (P.), B., 984.

Kennedy, J. E., and Hunt, L. A., disintegrating apparatus, (P.), B., 648.

Kennedy, W. P., influence of neutral salts on hemolysis, A., 635.

Kennedy, W. P. See also Ponder, E.

Kenner, J., Tod, C. W., and Witham, E., influence of nitro-groups on the reactivity of substituents in the benzene nucleus. VIII. 2:3- and 2:5-Dinitro- p -chlorotoluene, A., 58.

Kenner, J. See also Burton, H., and Christie, G. H.

Kennett, E. See Curtius, T.

Kent, W. L., brittle ranges in bronze, B., 326, 792*.

Kenyon, J., photo-electric polarimetry, A., 378.

Kenyon, J., and Robinson, P. H., diphenyl series. I. Migration reactions, A., 830.

Kenyon, J. See also Banfield, F. H., Bell, F., Domleo, A., Gough, G. A. C., and Harrison, P. W. B.

Kepianska, (Mle.) E., and Marchlewski, L., ultra-violet absorption spectra of hydroxybenzene derivatives, A., 775.
absorption of ultra-violet light by organic compounds. IX., A., 1193.

Keppeler, G., gasification and carbonisation of peat, B., 616.
 Keppeler, G., and Schmidt, J., oil-bearing chalk at Heide (in Holstein), B., 306.
 Keppeler, H., See Brigi, P.
 Kerb, J., manufacture of tetraglucosan, (P.), B., 310.
 Kermack, W. O., Lambie, C. G., and Slater, R. H., carbohydrate metabolism. I. Utilisation of dihydroxyacetone by the animal body and a method for its determination, A., 861.
 Kermack, W. O., and Williamson, W. T. H., anomalous flocculation of clay, A., 679.
 Kermar, M. J., evaporator, (P.), B., 144, 696.
 crystalliser, (P.), B., 392.
 centrifugal evaporation, (P.), B., 935.
 Kern, E. F. See Colcord, F. F.
 Kern, E. J. See Wilson, J. A.
 Kern, W. See Fletcher, F.
 Kernoahan, R. B., apparatus for coking coal, (P.), B., 624*.
 operating coke ovens, (P.), B., 907.
 Kernot, J. C., and Speer, (Miss) N. E., bone glues, B., 557.
 production of glue and gelatin from fish, B., 557.
 Kerpely, K. von, high-quality cast iron with high carbon and phosphorus contents as an electric furnace product, B., 92.
 Kerr, C. A. See Henderson, G. G.
 Kerr, N. G., and Young, W. J., action of certain fat solvents on alcoholic fermentation, A., 1277.
 action of ether on the yeast-cell. I. Carboxylase, A., 1277.
 Kerr, P. F. See Zanetti, J. E.
 Kerr, R. S. See Burt-Gerrans, J. T.
 Kerr, S. E., inorganic composition of blood. I. Effects of haemorrhage on inorganic composition of serum and corpuscles. II. Changes in potassium content of erythrocytes under certain conditions, A., 634.
 Kerridge, (Miss) P. M. T., glass electrodes, A., 1115.
 buffering power of the blood of *Maia squinado*, A., 1267.
 Kerridge, (Miss) P. M. T. See also Bayliss, L. E., and Katz, L. N.
 Kerschbaum, F., filling for gas protection apparatus, (P.), B., 902.
 Kerschbaum, H., duration of light emission from atoms of alkali metals, oxygen, and nitrogen, A., 652.
 Kershaw, S. H., safety in the manufacture of nitric, sulphuric, and mixed acids, and ammonium nitrate, as used in explosives, B., 220.
 Kersten, J., decomposition of alkali chlorides by steam in the presence of silicate, (P.), B., 88.
 decomposition of magnesium chloride by steam, (P.), B., 789.
 Kersten, L. See Rupe, H.
 Kessler, F., refining of sugar, (P.), B., 336.
 continuous crystallisation of sugar, (P.), B., 602.
 extraction of sugar from sugar cane, (P.), B., 928.
 Kessler, H. See Brand, K.
 Kestenbach, J. See Tröger, J.
 Kestner, P. J. F., refractory cement and concrete, (P.), B., 277*.
 Keul, H. J., measurement of concentration of carbon dioxide in the air close to agricultural crops, B., 1025.
 Kentmann, J. See Oberhofer, P.
 Kewley, J. See Asiatic Petroleum Co., Ltd.
 Keyes, D. B., "two-type" lacquer solvents, B., 67.
 Keyes, (Miss) M. G. See Washington, H. S.
 Keys, D. A., striated discharge in hydrogen, A., 7.
 Keys, D. A., and Home, M. S., spectrographic examination of the striated discharge in mixed gases, A., 765.
 Keyssner, E., relation between the viscosity of resin solutions and the constitution of the solvent, B., 248.
 Kharasch, M. S., water-soluble metallic organic compound, (P.), B., 899.
 Khastgir, S. R. See Barkla, C. G.
 Kichline, F. O., and Bethlehem Steel Co., extracting nickel and cobalt from ferruginous ores, (P.), B., 755.
 Kickton, A., and Mayer, F., behaviour of gelatin towards colouring matter in wines, B., 562.
 Kidd, J. T. See British Celanese, Ltd.
 Kiddle, J. K., burning limestone, (P.), B., 876.
 electric furnace, (P.), B., 985.
 Kielbasinski, W., Griesheim Naphthol AS red pigments in dyeing and printing, B., 705.
 Klemstedt, H., apparatus for examining oils, particularly motor lubricating oils for absorbed petrol ["crank-case dilution"], by distillation with steam, B., 970.
 Klemstedt, H. See also Zeehe M. Stennes.
 Klen, R. M., bleaching and removing size from raw silk fabrics (bourrette silk), (P.), B., 873.
 Klepenbener, L., production of magnesia from dolomite, B., 874.
 Kiesel, A., chemical composition of the sporangial wall of *Myxomycetes*, A., 204.
 protoplasm; composition of the plasmodium of *Reticularia lycoperdon*, A., 204.
 reproductive organs of plants; chemical composition of spores of *Aspidium filix-mas* (male fern), A., 440.
 Kieser, F., bleaching textile materials by the "pack" system with circulating liquor, (P.), B., 970.
 Kies, C. C., and Laporte, O., displaced series in the spectrum of chromium, A., 660.
 Kies, C. C. See also Meggers, W. F.
 Kikuchi, S. See Kinoshita, S.
 Kikuta, T., malleable cast iron and the method of its graphitisation, B., 669.
 Kilby, J. N., and Spalton, A. H., refining steel, (P.), B., 61.
 Kilgore, A. J. See Sherwood, T. R.
 Kilgore, A. M. See Walters, W.
 Killian, H., sugar. VI. and VII. A., 51, 940.
 Killian, J. A. See MacNeal, W. J.
 Killian, T. J., thermionic phenomena caused by vapours of rubidium and potassium, A., 653.
 Killick, E. M. See Mellany, M.
 Klinner, E. See Hodgson, H. H.
 Kirkpatrick, M., *junc.*, catalysis in buffer solutions, A., 919.
 Kimmel, V. E., and Eastman Kodak Co., reducing the viscosity characteristics of nitrocellulose materials, (P.), B., 1009.
 Kimmel, V. E. See also Kocher, N. S.
 Kimura, G. See Ishikawa, F.

Kimura, K., Japanese minerals containing rarer elements. IV. Analyses of zircon, xenotime, and allanite, A., 144.
 Japanese minerals containing rarer elements. V. Analyses of fergusonite, hancatite, and oramalite, A., 144.
 highly unsaturated acids in ox-liver oil, B., 285.
 Kimura, K. See also Shibata, Y., and Tsujimoto, M.
 Kind, W., pectin contents of flax, B., 911.
 Kind, W., and Auerbach, J., comparison of "wetting-out" agents [for textile processes], B., 974.
 King, A. S., spectroscopic phenomena of the high-current arc, A., 447, 1070.
 King, A. T., specific gravity of wool and its relation to swelling and sorption in water and other liquids, B., 136.
 King, A. T. See also Barratt, J., and Hirst, H. R.
 King, C. G. See Averill, H. P., Etzel, G., and Harrison, G. J.
 King, E. J., reactions of lactones with aromatic hydrocarbons and aluminium chloride, A., 288.
 King, F. E., and Partington, J. R., solubility of sodium iodide in ethyl alcohol, A., 236.
 vapour pressures of chlorine dioxide, A., 569.
 King, H., and Murch, W. O., trypanoacid action and chemical constitution. II. Arylamides of 4-aminophenylsarcin acid, A., 186.
 King, H. See also Balaban, I. E., Durham, F. M., and Hewitt, L. F.
 King, H. J. S., chromammines. II. Hydroxopentamminchromic salts and electrical conductivities of chromammines, A., 812.
 King, H. S. See Richards, T. W.
 King, J. G., and MacDougall, D., determination of carbon in coal, B., 118.
 King, K. V., and Standard Oil Co., apparatus for hydrocarbon-oil-cracking operations, (P.), B., 622.
 King, L. V., gyromagnetic electrons and a classical theory of atomic structure and radiation, A., 991.
 King, R. M., electrical resistivity of some ceramic materials at elevated temperatures and a simple commercial method for its determination, B., 878.
 King, R. O. See Callendar, H. L.
 King, W. R., and Hanson & Van Winkle Co., electroplating [iron with nickel], (P.), B., 132.
 King, W. W., and Barrett Co., [paracumarone] varnish, (P.), B., 681.
 Kingman, W. A., determination of water content of liquid gluc, B., 206.
 Kingsbury, E. F., and Western Electric Co., Inc., metallic composition [alloy], (P.), B., 18*.
 Kinkead, R. W., simple and reliable test for mercerisation, B., 535.
 Kinney, S. P. See Joseph, T. L., and Sherman, R. A.
 Kinoshita, S., Kikuchi, S., and Hagiomo, Y., mode of radioactive disintegration accompanied by secondary β -ray emission, A., 1076.
 Kinsel, A., recovery of sodium plumbite in the oil industry, B., 37.
 Kintzinger, K. See Burgess, F.
 Klinzle, C. J., and Titanium Alloy Manufacturing Co., zirconium oxide complex, (P.), B., 89.
 zirconium oxide compound [pigment], (P.), B., 760.
 Kippe, O. See Brück, Kretschel & Co.
 Kipping, F. B., and Pope, (Sir) W. J., resolution of α -alanine and formation of α -trans-2:5-dimethylpiperazine, A., 383.
 preparation and resolution of α -cis-2:5-dimethylpiperazine, A., 739.
 Kipriyanov, A., action of α -oxides on esters of aromatic amino-acids, A., 950.
 Kipriyanov, A. See also Krasyski, K.
 Kirby, E. B., separating metal from material containing it, (P.), B., 591.
 Kirby, J. E. See Gilman, H.
 Kirby, J. N. See Bally, A. H.
 Kirchlesen, E. See Benrath, A.
 Kirchlesen, M. See Rheinboldt, H.
 Kirchsen, P., extraction of crude barium sulphide and similar substances, (P.), B., 13.
 production of sodium thiosulphate, (P.), B., 53.
 Kircher, A., and Ruppert, F. von, reagent for the recognition of neosalvarsan unit for [therapeutic] application, B., 461.
 Kirchhoff, F., estimation of fineness of mineral fillers in the rubber industry, B., 289.
 rubber, a fibrous material, B., 797.
 dyeing apparatus, (P.), B., 873.
 Kirchhoff, H. See Schenck, M.
 Kirchhoff, L. See Vogt, E.
 Kirchhoff, H. See Akt.-Ges. f. Anilin-Fabrik.
 Kirchner, A. See Heidenheimer Kupferwerk Süddeutsche Kabelwerke A.-G.
 Kirchner, F., [Compton effect], A., 103.
 Compton effect and photo-electric effect in polarised X-rays, A., 768.
 Kirchner, O., and Nagell, H., determination of catalase and peroxidase in bacterial investigations, A., 979.
 Kirchner, W., and Chemische Fabrik Grünau, Landskron & Meyer A.-G., process for preparing cement, (P.), B., 364*.
 Kirk, M. P., and Kirk Simon Smelting Co., apparatus for producing zinc oxide, (P.), B., 126.
 Kirkaldy, A., electrodes for use in electrolytic systems for protecting boilers and the like, (P.), B., 650*.
 Kirkham, Hulett & Chandler, Ltd., and Hersey, S., gas washers, (P.), B., 351.
 Kirkham, Hulett & Chandler, Ltd., Hersey, S., and Stokes, F. W., apparatus for effecting intimate contact between liquids and gases, (P.), B., 728.
 Kirkham, Hulett & Chandler, Ltd., and Slater, W. F., apparatus for effecting intimate contact between liquids and gases, (P.), B., 857.
 Kirkpatrick, L. M., and Dickinson, R. G., crystal structure of sodium perolate, A., 1084.
 Kirkpatrick, L. M., and Pauling, L., crystal structure of telluric acid, A., 896.
 Kirkpatrick, S. McM., paste for admixture with cement and other materials for strengthening and/or waterproofing them, (P.), B., 55.
 Kirkup, F. See Kirkup, R. H.
 Kirkup, R. H., Kirkup, F., and Thompson, J., rotary dryer for whinstone, limestone, sand, cinder, and like material, (P.), B., 145*.
 Kirk Simon Smelting Co. See Kirk, M. P.
 Kirner, W. R., p -nitrobenzoyl esters of β -phenylethyl, γ -phenylpropyl, and δ -phenylbutyl alcohols, A., 611.
 effect of structure of organic halides on their rate of reaction with inorganic halides. I. Effect of the hydroxy-, phenoxy-, and benzyloxy-groups, A., 1224.

Kirrmann, A., action of sodium on bromoethylenes, A., 44.
 preparation of propargyl bromide, A., 710.
 action of organo-magnesium compounds on α -dibromopropylene, A., 817.
 n - δ -olefines, A., 934.

Kirrmann, A., and Volkinger, H., ultra-violet absorption of a pair of isomeric monobromoheptenes, A., 775.

Kirsch, P., composition of pitchblends, A., 267.

Kirsch, P. See Koenigs, E.

Kirschbraun, L., making [bituminous] emulsions, (P.), B., 91*, 479*.
 making [non-adhesive] bituminous emulsions, (P.), B., 276.

Kirsch, P. See Arndt, F.

Kishner, N., some peculiarities of inactive mandelic acid, A., 167.

Kishner, N., and Vendelstein, G. G., hydrolytic decomposition of the sulphonate acids of the isomeric xylenes in relation to the purification of commercial xylene, A., 304.

Kisselov, A. I. See Ipatiev, V. N.

Kissok, A., process of making alloy steel, (P.), B., 792.

Kistliakovskii, G., decomposition of ozone in red light, A., 34.

Kistliakovskii, G. B., ionisation potentials of nitrogen and hydrogen on iron and other metals, A., 1188.

Kistliakovskii, W., number of electrical quanta on colloid particles, A., 679, 1003.
 rusting of iron, B., 131.

Kita, G., Abe, K., and Tada, S., action of ozone upon petroleum. I. Action of ozone on the saturated hydrocarbons of petroleum, B., 475.

Kita, G., and Azami, K., comparison between bamboo cellulose and cotton cellulose, B., 8.

Kita, G., Azami, K., and Tomihisa, R., viscose. VI., B., 944.

Kita, G., Mazume, T., Nakashima, T., and Sakurada, I., esterification of alkali-cellulose. I. and II., A., 1026.
 naphtenic acid esters of cellulose, B., 400.
 cellulose esters of higher fatty acids. I. Ester formation from cellulose and the properties of the esters. II. Ester formation from alkali-cellulose and fatty acid chlorides, and composition of alkali-cellulose, B., 870.

Kita, G., Mazume, T., Sakurada, I., and Nakashima, S., cellulose esters of higher fatty acids, B., 45.

Kita, G., Sakurada, I., and Nakashima, T., cellulose esters, B., 944.

Kita, G., and Tomihisa, R., viscose. V., B., 944.

Kita, G., Tomihisa, R., and Ichikawa, H., properties of viscose, B., 45.
 researches on viscose. III. Preparation of alkali-cellulose, B., 481.

Kita, G., Tomihisa, R., and Iwasaki, S., composition of viscose, B., 45.

Kitasato, Z., constitution of coptisine, new alkaloid from *Coptis japonica*, A., 1160.

Kitching, O. C. H., light scattering of "abnormal" liquids, A., 15.

Kiston Engineering Co. (London), Ltd. See McNutt, W. A.

Kittredge, C. A. See Kittredge, H. G. W.

Kittredge, H. G. W., and Kittredge, C. A., hydrocarbon distillation, (P.), B., 41.

Kludt, M., Stark effect in hydrogen, A., 103.

Kjellberg, B. P. F., recovery of vanadium compounds from iron ores containing vanadium and titanum, (P.), B., 321, 549*.

Kjerrman, B., effect of manganese, silicon, and phosphorus on the perlite interval, B., 919.

Klaze, H. See Vorländer, D.

Klinber, W. J., and Koppers Co., container for testing coal and method of testing, (P.), B., 232*.

Klapchuk, W. See Chem. Fahrk auf Aktien (vorm. E. Schering).

Klarer, J. See Fischer, Hans.

Klarmann, E., preparation of 2:4-dihydroxydiphenylmethane and of 2:4-dihydroxydiphenylethane, A., 515.
 introduction of alkyl and aryl groups into the nucleus of polyhydric phenols, A., 1136.

Klarmann, E., and Figdor, W., alkyl and aryl derivatives of phloroglucinol, A., 516.

Klarmann, E., and Lehn & Fink, Inc., 2:4-dihydroxydiphenylethane, (P.), B., 931.

Klasen, P., and Sjöberg, K., amylosecataextrin, A., 276.

Klasse, F. See Kühl, H.

Klaus, F. See Stark, H. C., Kommanditges. aul Aktien.

Klaus, K., monotoxin, A., 195.

Klavenn, W. See Curtius, T.

Klawitter, F. See Hock, H.

Kleb & Bark G.m.b.H. See Winter, L.

Klebver, action of farmyard manure alone and in combination with mineral fertilisers, B., 684.

Kleberg, J., hydroxides of yttrium and lanthanum as adsorbents, A., 468.

Kleemann, R. D., theory of the continuous spectrum, A., 2.
 thermodynamical equations determining the distribution of the constituents of a mixture between its phases, A., 1211.

Kleemann, F., test of the vertical [gas] retorts with a 24-hr. [carbonising] period at the Ilanover gasworks, B., 82.

Klees, A. L., and Combustion Utilities Corporation, flotation agent, (P.), B., 755.

Klees, L. See Gault, H.

Klecsatell, H., behaviour of bile acids in blood and urine during pregnancy; methods of detection and determination of bile, A., 1169.

Klein, A., light oils from low-temperature tar, B., 148.

Klein, A., Harrow, B., Pine, L., and Funk, C., nutritive value of various layers of the wheat and corn [maize] kernel, A., 762.

Klein, A. L., secondary emission from a nickel surface due to slow positive ion bombardment, A., 105.

Klein, C. A., prevention of lead poisoning in industry. I. Rubber industry, B., 715.
 importance of particle properties in paint pigments, B., 954.
 rôle of the chemist in the investigation of problems of industrial hygiene, B., 998.

Klein, C. A., and Brown, R. S., titanium pigments, (P.), B., 99.
 manufacture of glass, sand, or flint paper, emery cloth, and like abrasives, (P.), B., 948.

Klein, F., purifying and stabilising hydrocarbons [turpentine oil], (P.), B., 837.

Klein, G., production of aldehydes from sugars, A., 600.

Klein, G., Eigner, A., and Müller, H., nitrate assimilation by fungi, A., 1280.

Klein, G., and Pirsche, K., acetaldehyde as an intermediate product of plant respiration, A., 439.
 utilisation of various materials in plant respiration, A., 1182.

Klein, G., and Werner, O., formaldehyde as an intermediate product of carbon dioxide assimilation, A., 439.

Klein, H. See Blitz, H.

Klein, H. See Badische Anilin- & Soda-Fabrik.

Klein, O., residual nitrogen content of blood in its relationship with renal insufficiency and uremia, A., 318.

Klein, P., and Szegvari, A., concentrating or coagulating rubber emulsions, (P.), B., 204.
 manufacture of rubber goods from rubber emulsions, (P.), B., 289, 797.

Klein, W. See Hellerich, B.

Kleinmann, E., variation of surface tension of sodium chloride solutions with time, A., 900.

Kleinmann, F., manufacture of metal [copper] sulphate solutions, (P.), B., 156.

Kleinmann, H., nephelometric determination of phosphoric acid, A., 1068.
 nephelometric investigation of enzymic proteolysis. VI. Kinetics of trypsin hydrolysis, A., 1276.

Kleinmann, H. See also Rona, P.

Kleist, L. L. See Elliott, G. A.

Kleitman, N., physiology of sleep. III. Effect of muscular activity, rest, and sleep on the urinary excretion of phosphorus, A., 639.

Klemen, R. See Samec, M.

Klemenc, A., metals and nitro acid; heterogeneous reactions, A., 482.

Klemenc, A., and Gross, P., nitric acid. II. Behaviour of nitrous acid at the anode, A., 807.

Klemenc, A., and Nagel, A., nitric acid. III. Partial pressures of aqueous nitric acid solutions at 12.5° and 30°; partial pressure of hydrochloric acid at 12.5°, A., 1000.

Klement, R., constitution of sulphocobaltiates, A., 372.
 phosphoric acid as bridge in complex cobalt compounds, A., 1219.

Klemm, B. See Taiffel, K.

Klemm, R., and Wild, G. O., faint coloration of minerals, A., 594.
 colour and structure of quartz, A., 665.

Klemm, R. See also Ade, G., and Wild, G. O.

Klemm, W., indium halides. I., A., 669.
 density and molecular state of fused salts, A., 670.

Klemm, W., and Blitz, W., conductivity of fused salts, A., 667.

Klemm, W., and Bockstroth, J., density measurements with fused chlorides, A., 669.

Klemm, W. See also Blitz, W.

Klemp, W. See Giudzi, W.

Klencke, H., and American Lurgi Corporation, production of sulphuric acid, (P.), B., 13*.

Klencke, H. See also Metallbank & Metallurgische Ges.

Klenk, E., fission products of cerebrone, A., 749.
 nervone acid, A., 1124.
 new acid from cerebrosides of brain, A., 1124.

Klenow, L., importance of free fatty acids in fish oils for chamoising, B., 599.

Klefeth, W., electroresistance in gases, A., 1196.

Kliegl, A., and Hölle, W. (with Kiltzing, B. von, and Balz, G. J.), action of alcoholic alkali hydroxide on *m*-nitrobenzylidene halides, A., 720.

Kliegl, A., Wünsch, A., and Weigle, R., isomerism of 9-substituted fluorenes, A., 612.

Klinsehenger, E., gas formation in the upper layers of sugar-agar, A., 759.

Kling, A., and Florentin, D., hydrogenation of organic substances at high temperature under increased pressure, A., 381.
 hydrogenation of organic substances at high temperature and pressure using non-hydrogenating catalysts, A., 381.

Kling, A., and Lassieur, A., stability of carbon dioxide solutions, A., 240.
 the p_H value of water, A., 355.
 determination of sulphur in iron and steel, B., 583.

Kling, S. L., relative merits of mono-, di-, and tri-calcium phosphates as soil fertilisers, B., 892.

Klingaman, F. E., selective dispersion of mercury vapour at the absorption line 2530 Å, A., 1186.

Klinger, P., determination of gases in iron and steel, B., 983.

Klingner, R., breakdown of substituted guanidines at a high temperature, A., 945.

Klingstedt, F. W., formation of nitrosates from olefines, A., 44.

Klinke, K., pigment studies in connexion with a case of "ringed" hair, A., 88.

Klipstein, E. C., & Sons Co., Stone, H. G., and Jacobson, B. H., preparation of *o*-benzoylbenzoic acid, (P.), B., 869.

Klisieck, A., ammonia content and formation in blood. V. Ammonia content of normal human blood, A., 968.
 differences between the blood of men and of women, A., 1267.

Klisieck, A. See also Parnas, J. K.

Klitzing, B. von. See Kliegl, A.

Klijukvin, N. See Ipatiev, V. N.

Klopfenstein, A. See Grinacher, A.

Klopsch, C. Z. See French, H. J.

Klopstock, E. See Wohlgemuth, J.

Klopstock, H., electrolysis of alkali chlorides, (P.), B., 164.

Klopstock, H., and Neumann, W., production of potassium carbonate, (P.), B., 53*.

Klosky, S., and Woo, L., solubility of silver oxide in mixtures of water and alcohol, A., 1089.

Klotz, L. J. See Coons, G. H.

Klit, A. See Rheinland Verein Chem. Fabr. A.-G.

Klugh, B. G., and General Phosphorus Co., production of superphosphates, (P.), B., 558.

Kluyver, A. J., non-existence of some enzymes, A., 1274.

Kluyver, A. J., Donker, H. J. L., and Hooft, F. van't, formation of acetyl-methyl-carbinol and β -butylene glycol in metabolism of yeast, A., 203.

Kluyver, A. J., and Struyk, A. P., function of phosphates in the dissimilation of hexoses, A., 378.

Knafl-Lenz, E., kinetics of ester hydrolysis by liver lipase, A., 132.
 physiological assay of preparations of digitalis, B., 995.

Knapp, A. W., drying of vegetables, B., 509.
 fermentation of cacao, B., 564.

Knapp, W., Wandeker Maschinenfabr. & Eisenbauanst B. Fischer & C. Steiling, obtaining light hydrocarbons and carbon from heavy hydrocarbons, coal tar, pitch, etc., (P.), B., 863.

Knaus, H. H., active principles of pituitary extract, A., 205.

Knebel, E. See Hochheim, E.

Knecht, E., and Hibbert, E., behaviour of dextrose and certain other carbohydrates towards dyes and towards potassium ferricyanide in an alkaline medium, A., 149.
 chitin, B., 1008.

Knecht, E., and Maurice, N. B., unsaponifiable constituents of commercial rosins, with notes on resin oil and on the polymerisation of turpentine, B., 21.

Knecht, E., and Muller, E. F., comparison of the effects of oxidation before and after the mercerisation of the cotton fibre, B., 269.

Knehe, E. See Bergmann, M.

Kneser, H. O., excitation and intensity of nitrogen bands resulting from electronic impacts, A., 653.

spectra resulting from the excitation of certain nitrogen compounds, A., 658.

Knibbs, N. V. S., cementitious material, (P.), B., 241.

Kniga, A. See Dumanski, A.

Knight, A. F., and Western Metallurgical Co., volatilisation of metals from their ores, (P.), B., 756.

Knight, H. C., and Walton, D. C., deflagration products of smokeless powder, B., 388.

Knilling, W. von. See Schmidt, Erich.

Knipp, C. T., and Sowers, N. E., formation of α -ray tracks by simple means, A., 1076.

Knobel, M., theory of overvoltage, A., 479.

Knobel, M., and Norton, R. B., penetration of electrolytic hydrogen through iron, A., 479.

Knoll, R., oxidation of sulphides to sulphoxides, A., 720.

Knoll & Co., preparation of a basic compound of tri-iodophenol and bismuth, (P.), B., 900.

Knoll & Co., and Bole, H., preparation of a derivative of 1-phenyl-2:3-dimethyl-6-pyrazolonylmopyrine, (P.), B., 465.

Knoll & Co. See also Schmidt, K. F.

Knopf, C., production of waterproof textile material, paper, and the like, (P.), B., 627.

Knorr, C. A. See Fajans, K.

Know Mill Printing Co., Ltd., Mort, T. J., and Weeks, F. W., treatment of cellulosic materials, fibres, yarns, and fabrics with liquids [sulphuric acid], (P.), B., 11.

Knowles, A. E., electrolytic cell, (P.), B., 135*.

Knowles, H. B. See Lundell, G. F. F.

Knowles, H. J., temperature and analytical changes in sugar liquor during bone-black filtration, B., 72.

Knudsen, H., liquid fuel burners, (P.), B., 941*.

Knudsen, P., benzoylation of diacetomethylene diamide, A., 506.

Knudsen, S., measurement of the hydrogen-ion concentration of cheese by means of the quinhydrone electrode, B., 106.

Knudson, A. See Randles, F. S.

Kobayashi, K., and Yamamoto, K., saccharification of starch by Japanese acid clay, A., 1015.

Kobbé, W. H., indurating wood with sulphur, B., 663.

strengthening and indurating concrete with sulphur, B., 668.

Kobbé, W. H., and Texas Gulf Sulphur Co., improving the properties of articles formed of fibrous materials with cement binding agents, (P.), B., 825.

Kobbé, W. H. See also Bacon, R. F.

Kobel, M. See Nemberg, C.

Kobel, P. A., manufacture of neoarsphenamine [neosalvarsan]; manufacture of hydrochlorides of 3:3'-diamino-4:4'-di[hydroxyarsenobenzene] [salvarsan], (P.), B., 217.

Kobel, P. A. See also British Thomson-Houston Co., Ltd., and Looney, J. M.

Kobernik, J. E., and Newton Process Manufacturing Co., treating hydrocarbon gases, (P.), B., 780.

Koblic, O., life-period of ionium, A., 105.

Kobori, B. See Abellin, I.

Kobryner, S. See Jabczynski, K.

Koch, E. See Wrangell, M. von.

Koch, E. M., and Cahan, M. H., physiological action of furan, A., 91.

Koch, F. C., and Reed, C. I., physiological action of light. V. Increase in uric acid in blood irradiated directly, A., 319.

Koch, F. C. See also De Ganahl, C.

Koch, J. A. See Cretcher, L. H.

Koch, K., determination of anthracene, B., 815*.

Koch, L. See Masing, G.

Koch, W. See Mund, W.

Kocher, N. S., Kimmel, V. E., and Eastman Kodak Co., reducing viscosity of nitrocellulose, (P.), B., 122.

Kochmann, E. L. See Underwood, H. W.

Kochmann, H., measurement of fluids in perfusion experiments, A., 212.

Kochmann, M., influence of some chemical agents on gaseous metabolism, A., 540.

Kodak, Ltd., and Bent, W. G., treatment of felted materials, papers, and the like [for photographic purposes], (P.), B., 77.

Kodak, Ltd., Bent, W. G., and Crowther, R. E., manufacture of photographic films, papers, and the like, (P.), B., 516.

Kodak, Ltd., and Haste, J. H., manufacture of photographic films, (P.), B., 29*.

Kodama, K., xanthine oxidase. VIII. Oxidation-reduction potential of the oxidase system, A., 1175.

Kodama, K. See also Dixon, M.

Koeblig, J., production of lasting coloured stains in and upon the surface of cement or other building materials, (P.), B., 441.

Koechlin Frères, printing dado effects in one or more colours, B., 580.

Köchling, H., [alleged] artificial glycolytic enzyme, A., 1059.

Kögel, G., primary action of photochemical absorption; optical photochemical transformation of radiation, A., 1014.

silver acetyle emulsions, B., 612.

Kögel, G., and Steigmann, A., photo-sensitiveness of dyes, A., 693.

nature of optical sensitisation and desensitisation, B., 386.

chemical [photographic] sensitisers, B., 467.

optical sensitisation. II. Water as sensitiser; [assimilation of carbon dioxide by plants], B., 772.

Kögl, F., colouring matters of fungi. V. Constitution of polyporic acid, A., 407.

Kögl, F., and Lang, A., mechanism of Fichter's synthesis of dibydroxydialkylquinones, A., 729.

Kögler, F. See Kanfmann, H. P.

Koeh, E. See Schleikum-Werke A.-G.

Kohl, A. See Treadwell, W. D.

Kohler, G. See Chem. Fabr. Griesheim-Elektron.

Köhler, H. See Guthe, A.

Koehler, W. A., determination of the relative surface areas of powdered materials, B., 303.

Kochline, I. J., coating iron or steel articles [with tin-aluminium alloy], (P.), B., 832.

Kohn, H., quinhydrone electrode, A., 1219.

Köhn, H., use of tung oil, B., 333.

Köln-Rottweil A.-G., manufacture of covering materials, (P.), B., 988.

Koenemann, E., steam or other vapour power plants utilising [A] caustic potash, [B] soda, [C] caustic soda, or like auxiliary fluid, (P.), B., 304.

Koenen, H. See Dilthey, W.

König, A., and Staalt. Porzellan-Manufatur, porcelain crucible, (P.), B., 129*.

König, F., determination of small quantities of halogen compounds, especially of perchloric acid, A., 1017.

König, H., elastic after-effect [of metals and glass] at different temperatures, B., 33.

König, J., structure of cell-membranes and their behaviour during disintegration, A., 701.

König, J. See also Manchot, W.

König, W., "polymethine" dyes and a general dye formula as basis of a new generalisation of colour chemistry, A., 522.

Zocher's vortex method, A., 1097.

König, W. [with Hey, K.], vinylene-homologous furfuraldehydes, A., 175.

König, W., and Buchheim, R., existence of the simplest, monomeric dihydroquinolines, A., 178.

Koenigs, E., Freigang, W., Lobmayer, G., and Zscharn, A., benzene-4-hydrazo- and -azo-pyridine derivatives, A., 412.

Koenigs, E., Friedrich, H., and Jurany, H., derivatives of 4-aminopyridine, A., 178.

Koenigs, E., Mensching, H., and Kirsch, P., derivatives of 2- and 4-benzyl-pyridine, A., 1152.

Koenigs, E., Weisz, W., and Zscharn, A., 4-pyridylhydrazine, A., 413.

Königsberger, J., crystal lattice pores, A., 562.

Königsberger Zellstoff-Fabrik & Chemische Werke Koholyt A.-G., preparation of colloidal metals or compounds, (P.), B., 217.

manufacture of chlorinated products from cellulose waste lyes, (P.), B., 401.

separation of iron compounds from compounds or mixtures containing iron oxide, (P.), B., 744.

Königsberger Zellstoff-Fabrik & Chemische Werke Koholyt A.-G., and Schlumberger, E., electrolytic decomposition of alkali chloride solutions, (P.), B., 757.

Koepf & Co., R., and Elöd, E., preparation of acid sodium formate, (P.), B., 772.

Koepf & Co., R. See also Bredig, G., and Enderl, M.

Köppen-Kastrop, P. See Sielisch, J.

Körber, F., etching colours of alloys of iron and silicon, B., 749.

iron silicides, B., 753.

Körber, F., and Hessel, W., production of artificial stone, stoneware, and the like from boiler slag, dust slag, or ashes, (P.), B., 441*.

Koester, K. K. See Hanke, M. T.

Köster, H. See Bergmann, M.

Köster, W., production of a regular structure in the recrystallisation of [cold-rolled] copper, B., 546.

etching figures on copper as a means of determining the crystal orientation, B., 760.

technological behaviour of pressed brass bars, B., 750.

Kösgzi, B., volumetric determination of hypophosphorous acid and hypophosphites, A., 702.

Koethen, F. L., rôle of graphite in lubrication, B., 567.

Koets, P. See Jaeger, F. M.

Kötz, A., and Merkel, P., reactions of hydroaromatic amines, A., 721.

Kötz, A., and Richter, K., Δ^1 -cyclohexenol and Δ^2 -cyclohexenone, A., 281.

Kogerman, P. See Weiderpass, N.

Kohen, W., [steel] bomb calorimeters, B., 3.

Kohl, F. See Cassella & Co., L.

Kohl-Egger. See Abderhalden, E.

Kohlenhöldings-Gesellschaft m.b.H., production of fuel of high calorific value from semi-coke, (P.), B., 4.

distilling bituminous substances at a low temperature, (P.), B., 38.

puerulent fuel furnaces for water-tube boilers, (P.), B., 224*.

Kohlenstaub Gesellschaft m.b.H., apparatus for supplying coal dust to furnaces by means of compressed air, (P.), B., 701*.

Kohlenveredlung Gesellschaft m.b.H., retorts, (P.), B., 372.

Kohlenveredlung Gesellschaft m.b.H., and Geissen, C., drying of coal and other solid bituminous substances of the character of coal, (P.), B., 128.

Kohlenveredlung Gesellschaft m.b.H. See also Lasche, O.

Kohler, E. P., isoxazoline oxides. IV. Benzoylphenylisoxazoline oxide, A., 309.

orthoxazoline [1:2(6)-oxazine] derivatives, A., 530.

Kohler, E. P., and Barrett, G. R., isoxazoline oxides. V. Carboxyl derivatives, A., 849.

Kohler, E. P., and Butler, F. R., relative ease of $\alpha\delta$ - and $\alpha\zeta$ -addition, A., 713.

Kohler, E. P., and Reid, G. H., addition of cyanoacetic esters to esters of glutamic and β -methylglutamic acids, A., 48.

Kohler, E. P., and Shohan, J. B., isoxazoline oxides, A., 1140.

Kohler, M., activity of the commercial extracts of parathyroid glands, B., 961.

Kohler, S., and Hall, G., determination of the acidity of paper, B., 263.

Kohlins, W. N., manufacture of nickel salts, (P.), B., 156.

Kohlschütter, V., manufacturing finely-divided solid substances, (P.), B., 858.

Kohlschütter, V., Bottelsky, M., and Egg, C., formation of somatoid forms, V., A., 15.

Kohlschütter, V., and Egg, C., effect of the addition of dyes on the crystallisation of calcium carbonate, A., 14.

Kohman, E. F., Eddy, W. H., Carlson, V., and Halliday, N., vitamins in canned foods. V. Peaches, B., 382.

Kohman, E. F. See also Eddy, W. H.

Kohman, H. A., Irvin, R., and Fleischmann Co., manufacture of leavened bread (P.), B., 848.

Kohn, M., and Grün, S., bromophenols. XII. Bromo- and bromonitro-ethers of pyrogallol, A., 234.

Kohn, M., and Heller, M., bromophenols. XIII. Exchangeability of halogen atoms and nitro-groups in some halogenonitrophenol ethers, A., 281.
 Kohn, M., and Rosenfeld, A., bromophenols. XIV. Halogenophenols, A., 282.
 bromophenols. XV. Pseudophenols, A., 282.
 Kohn, M., and Schwarz, I., quinonoid oxidation product of benzylidenedi-
β-naphthol [phenylid-2-hydroxy-*α*-naphthylmethane], A., 516.
 bromophenols. XVII. Preparation of brominated *α*-naphthaquinones, A., 521.
 Kohn, M., and Segel, A., bromophenols. XIX. Brominated nitro- and dinitro-
 cresols, A., 832.
 Kohn, M., and Soltész, G., bromophenols. XVI. A new (3:4:5-)tribromo-
 phenol, and a new (4:5:6-)tribromo-*o*-cresol, A., 395.
 Kohn, M., and Süssmann, S., bromophenols. XVIII. Tri- and tetra-halogen-
 ated phenols, A., 831.
 Kohn, W., defecation of diffusion juice with dolomitic lime, and with the scums
 obtained by saturating the intermediate juice, B., 507.
 Kohn-Abré, E., toxicological investigation of mercury, A., 328.
 Kohn-Abré, E., and Kawaishi, S., nitrates in animal and vegetable tissues,
 A., 1283.
 Kohnstamm & Co., H., laundering of textile material after bleaching, (P.), B.,
 123.
 Kohnstamm & Co., H., See also Phair, R. A.
 Koholyt A.-G. See Schlumberger, E.
 Kohorn, O. von, and Lehner, A., drive for machines for spinning artificial silk,
 (P.), B., 1010.
 Koike, T., sesquiterpene family in camphor blue oil. I. Reaction with sulphur
 and the resulting compounds, A., 954.
 Koizumi, K., synthesis and destruction of phosphatides in the animal organism,
 A., 540.
 Kolzumi, M., electromagnetic separators for the separation or concentration of
 minerals, (P.), B., 675.
 Kok, J. See Sluiter, (Mts.) E.
 Koken, I. See Fujihara, M.
 Kolbach, P., buffer substances in wort and beer. I. and II., B., 603, 686.
 Kolbach, P. See also Elektro-Osmose A.-G. (Graf Schwerin Ges.), and Windisch,
 W.
 Kolbe, A. See Späth, E.
 Kolhärster, W., determination of the absorption coefficient of the very penetrat-
 ing radiation, A., 553.
 Kolińska, J. H. See Milobedzki, T.
 Kollár, E., briquettes from powdered fuels, (P.), B., 308.
 Kollek, L. See Straus, F.
 Koller, I. See Ohle, H.
 Koller, K., pressure-gas producers, (P.), B., 778.
 Kollman, K. See Tammann, G.
 Kolodny, S. See Pringsheim, H.
 Kolodziejska, S., and Funk, C., rôle of insulin in phosphorus metabolism, A.,
 643.
 Kolotov, G. See Rutovski, B.
 Kolpenski, V. N. See Izmailski, V. A.
 Kolesky, G., treating [cracking] oils, (P.), B., 1004.
 Kolthoff, I. M., interpretation of neutralisation curves of mixtures of boric acid
 and polyhydric alcohols, A., 25.
 argentometric titration of iodides, A., 38.
 volumetric determination of nitrobenzene, A., 84.
 dissociation constants, solubility products, and the titratability of alkaloids,
 A., 125.
 reaction of neutral and distilled water, A., 139, 355.
 determination of hydrochloric acid by means of potassium iodate, as com-
 pared with the results obtained with sodium carbonate and borax, A., 139,
 813.
 micro-titration of iodide, A., 139.
 reaction between cupric copper and iodide, and between cuprous iodide and
 iodine, A., 255.
 clarification by charcoal of urine containing sugar, A., 444.
 expression for the reaction of aqueous solutions, A., 571.
 influence of boric acid on the electrolytic dissociation of electrolytes, A.,
 681.
 methyl-orange error in the colorimetric determination of p_H by comparison
 with the Clark [hydrogen phthalate] buffer mixtures, A., 701.
 iodometric titration of acids, A., 813.
 variation of the dissociation constant of boric acid with concentration, A.,
 907.
 titration of hypophosphorous acid and its salts with permanganate, A., 1018.
 carbonic acid content of distilled water and its determination, A., 1018, 1116.
 dissociation constants of compounds of boric acid with salts of some organic
 hydroxy-acids, A., 1206.
 titration of quinol with iodine or dichromate according to the ordinary and
 the potentiometric method, A., 1260.
 electrometric titration of alkaloids and the reaction of alkaloid salts, B., 74.
 modification of Schoorl's method of titrating sugar, B., 209.
 detection and determination of free chlorine in drinking water, B., 517.
 Kolthoff, I. M., and Kuylman, H. A., gravimetric determination of copper as
 cuprous iodide, A., 592.
 Kolthoff, I. M., and Robinson, C., determination of nitro-compounds by
 reduction with titanous chloride at the ordinary temperature, A., 420.
 Kolthoff, I. M., and Tekelenburg, P., potentiometric determination of hydro-
 gen-ion concentration at higher temperatures, A., 1220.
 Kolthoff, I. M., Tomiček, O., and Robinson, C., potentiometric evaluation of
 titanous chloride solutions, A., 376.
 Kolthoff, I. M., and Vleeschhouwer, J. J., buffer solutions with p_H value between
 2-2 and 6-0, A., 1220.
 Komarov, S. A., mechanism of intestinal secretion. IV. Action of known
 quaternary ammonium bases of meat extract on intestinal secretion, A., 430.
 Komarov, S. A. See also Krimberg, R.
 Komatsu, S., and Okinaka, C., proteins. II. and III. Action of superheated
 water on proteins. I. and II., A., 853, 1163.
 Komm, E., micro-determination of blood-sugar, A., 100.
 Alderbalde's reaction, A., 850.
 tryptophan-aldehyde reaction. IV. and V., A., 959.
 tryptophan-aldehyde reaction. III. Reaction of tryptophan with form-
 aldehyde and with *p*-dimethylaminobenzaldehyde, A., 1045.
 Komorovska, B. See Hanus, J.

Kon, G. A. R., and Smith, L. F., three-carbon system. V. Alkylation of un-
 saturated ketones, A., 952.
 Kon, G. A. R., and Speight, E. A., three-carbon system. VII. Derivatives of
 malonic acid, A., 1246.
 Kon, G. A. R. See also Farrow, M. D., and Johnson, J. D. A.
 Kon, S. See Funk, C.
 Konarzewski, J. See Zawadzki, J.
 Kondo, H., and Kondo, T., alkaloids of the group of *Sinomenium* and *Coccus*.
 VI. Alkaloid of *Coccus laurifolius*, DO., A., 82.
 Kondo, K. See Oshima, K.
 Kondo, M., effect of lime on preservation of the germinating power of seeds;
 means of drying [seeds], B., 764.
 Kondo, S., metabolism of acid-fast bacteria. VI. Influence of c_H on the growth
 of acid-fast bacteria in simple artificial media, A., 96.
 action of electrolytes on clays, B., 14.
 iron aventurine glaze, B., 54.
 chrome aventurine glaze, B., 90.
 Kondo, T. See Kondo, H.
 Kondratjev, V., dissociation of nitrogen by electron impact, A., 989.
 dissociation of heteropolar molecules by absorption of light, A., 1210.
 Kondratki, A. See Rutovski, B.
 Kondyrev, N. V. See Ipatiev, V. N.
 Konobejewski, S. T., crystal structure of rolled iron, nickel, and molybdenum
 plates, A., 1195.
 Konovalov, D. P., heats of combustion of cyclic hydrocarbons, A., 608, 785*.
 Konovalov, R. A. See Tschitschibabin, A. E.
 Konrad, E., and Pellems, L., oxidation of hydrazine. I. Potassium azodisul-
 phonate, A., 370.
 Konstas, A. S., and Société Anonyme Ind. des Matières Grasses et Savons "Velos,"
 purification of oils and fats, (P.), B., 713.
 Koontz, F. B., and Cosden & Co., cracking hydrocarbons, (P.), B., 263.
 Koox, C., [prevention of] bronzy shades in dyeing cotton and artificial silks
 with sulphur, basic, and direct dyes, B., 784.
 Kopaczewski, W., electro-capillary analysis of dyes, B., 353.
 Kopaczewski, W., and Szukiewicz, W., periodicity of colloidal reactions, A.,
 679.
 Kopaczewski, W. See also Henrjean, F.
 Koperberg, C. H., determination of husk in cocoa, B., 296.
 Kopfermann, H., and Ladenburg, R., electro-optical researches on sodium
 vapour, A., 216, 667.
 Kopfermann, H. See also Ladenburg, R.
 Kopfer, L., and Rosenzweig, S., manufacture of an acid crystalline saponin from
Primula species, (P.), B., 964.
 Koppe, P. See I. G. Farbenind. A.-G.
 Koppers, H., conversion of poorly coking coals into useful metallurgical coke,
 (P.), B., 229.
 continuous production of coke and gas, (P.), B., 861.
 Koppers, H., and Koppers Development Corporation, tar distillation apparatus,
 (P.), B., 909.
 Koppers Co., elimination of hydrogen sulphide from fuel gases such as coal gas,
 water-gas, and the like, and from air; treatment of spent liquids of liquid
 gas purification, (P.), B., 5.
 coking retort ovens, (P.), B., 38.
 eliminating hydrogen sulphide and other noxious impurities from fuel gases,
 and from air, (P.), B., 39.
 coking coal, (P.), B., 117.
 removal of naphthalene and analogous hydrocarbons from fuel gases, (P.),
 B., 624*.
 absorption towers, (P.), B., 649.
 aeration and gas purification processes and apparatus; gas and liquid contact
 apparatus and methods; purification of gases; removal of hydrogen
 sulphide and other noxious constituents from gases, (P.), B., 813.
 Koppers Co., and Ackeren, J. van, coking retort ovens, (P.), B., 350, 476.
 Koppers Co., and Becker, J., coke ovens and batteries thereof, (P.), B., 476.
 Koppers Co., Morgen, R. A., Yard, W. S., and Rosenstein, L., gas purification
 and regenerating sulphided alkaline solutions, (P.), B., 5.
 Koppers Co. See also Ackeren, J. van, Darrin, M., Klaiber, W. J., and Sperr,
 F. W., jun.
 Koppers Development Corporation. See Koppers, H.
 Koppova, B. See Votček, E.
 Korczyński, A., and Fandrich, B., preparation of nitriles by the diazo-reaction,
 A., 1037.
 Korczyński, A., and Namysłowski, S., derivatives of azoimide, A., 161.
 Koriatzki, W., Schleede, A., and Schroeter, F., yield of visible light by excitation
 of phosphors by slow cathode rays (cathodoluminescence), A., 777.
 Kordes, E., eutectic point lowering in binary mixtures, A., 798.
 Kordes, E. See also Tammann, G.
 Koref, F. See Alsterthum, H.
 Korenyi, A. See Surányi, L.
 Korn, methods of distinguishing sulphite- and soda-cellulose in paper, B., 47.
 Kornfeld, G., and Müller, H., photochemical formation of hydrogen chloride,
 A., 252.
 Korolkov, K. N., anaerobic decomposition of sewage sludge, B., 806.
 Korschun, G., and Roll, (Mme.) O., mechanism of the action of hydrazine on
 α -diketones with formation of 1:2-diazines or amidopyrroles; absorption
 spectra of some 1:2-diazine derivatives, A., 961, 1154.
 Korsunskii, M. See Zvijagintsev, O.
 Korsunsky, M. G., alloys of platinum or palladium, (P.), B., 755.
 gold alloys, (P.), B., 755.
 manufacture of alloys, (P.), B., 755.
 Kosche, W., [prevention of] bronzy shades in dyeing with sulphur dyes, B.,
 783.
 Kosche, W. See also Hellerich, B.
 Koser, S. A., utilisation of the salts of organic acids by the *coli-aerogenes*
 group, A., 1178.
coli-aerogenes group [of bacteria] in soil, B., 694.
 Koskowsky, W., influence of histamine on the intestinal secretion of the dog,
 A., 319.
 Koskowsky, W., and Ivy, A. C., effect of pancreatectomy on the secretion of
 succus entericus, A., 426.
 Koslov, W. See Rutovski, B.
 Kossel, A., and Staudt, W., determination of arginine and histidine, A., 967.
 basic proteins, A., 1268.

Kosterlitz, H., and Petow, H., behaviour of lipase during autolysis of the liver, A., 1059.

Kostka, F., and Rhenische Metallwaren- & Maschinenfabrik, electric-arc furnace, (P.), B., 65.

Kostrin, K., solubility of formolites, B., 475.

Kostyleva, E., pectolites from Russian Lapland, A., 1022.

Kostytshev, S., non-existence of certain enzymes, A., 756.

Kostytshev, S., Ryskalschuk, A., and Schwezowa, O., *Azotobacter agile*, A., 86.

Kotchergine, E. See Favorski, A. E.

Kotera, F. See Ochi, S.

Kotibhasker, M. G., reducing power of sulphite-[cellulose] waste liquor, and its use in drying and bleaching, B., 11.

Kondahl, B. See Troensgaard, N.

Koulen, K. See Merck, F.

Kovits-Zorkoczy, E. von, absorption of oxygen by pyrogallol, A., 100.

Kowalew, O. L. See Ragatz, R. A.

Kowalski, G. See Leuchs, H.

Kozak, J., Weinberger, M. F., and Prokopczuk, M., [manufacture of] dyestuffs from peat, (P.), B., 149.

Kozlowski, A., [antiseptic] effect of bile acids and of unsaturated fatty acids in the form of soaps, A., 864.

Krasny, G. M., action of sodium methoxide on some derivatives of *o*-dichlorobenzene, A., 1031.

Krajčinović, M., products of the action of chlorosulphonic acid on acetyl chloride, A., 1125.

Krakke, B., hypothetical emanation of potassium, A., 655.

Kracovski, J. See Farmer, E. H.

Kraenzlein, A. J., and Calkin, J. P., properties of typical crude oils from the producing fields of the Western Hemisphere, B., 318.

Kraemer, E. O., structure of gelatin gels, A., 124.

Kraemer, E. O. See also Stamm, A. J.

Krämer, F. See Schulz, M.

Krämer, W. See Schaum, K.

Kräntlein, G., Greune, H., Sedlmayr, R., Vollmann, H., and Grasselli Dyestuff Corporation, vat [benzanthrone] dyestuffs, (P.), B., 625.

Kräntlein, G., Sedlmayr, R., and Grasselli Dyestuff Corporation, condensation products [dyestuffs] of the anthraquinone series, (P.), B., 867.

Kräntlein, G. See also Farbw. vorm. Meister, Lucius, & Brüning, and I. G. Farbenind. A.-G.

Kraeck, (Frl.). See Benrath, A.

Krais, P., disintegration of fibrous raw materials by means of nitric acid, B., 86.

Krais, P., tensile strength and elongation of artificial silk, B., 268.

Krais, P., distinguishing viscose and cuprammonium silks by colour reactions, B., 579.

Kral, L., and Lengrand, Kral & Cie., material for depilating and bathing hides, (P.), B., 23.

Kral, S. See Shepard, N. A.

Kramer, B., and Howland, J., determination of calcium, magnesium, phosphate, and carbonate in bone, A., 1068.

Kramer, B. See also Howland, J., Pincus, J. B., and Shipley, P. G.

Kramer, G. A. See Simplex Refining Co.

Kramer, R. L. See Burke, C. E.

Kramer, S. P., bacterial filters, A., 1062.

Krane, W. See Weber, J.

Krane, H. M., use of eutectics as glazes, B., 632.

Krane, H. M. See also McDowell, S. J.

Krantz, J. C., jun., use of the potentiometer in the quantitative analysis of alkali alcohol solutions, B., 801.

Krantz, N., and De Moltke-Huitfeldt, L., decomposition of materials containing phosphoric acid, (P.), B., 261.

Krantz, N., producing sugar from cellulose, (P.), B., 337.

Krascheninnikov, T., gaseous exchanges in arctic brown algae exposed at low tide, A., 645.

Kraske, N. W., Gaddy, V. L., and Tolman, R. C., manufacture of urea [carbamide] from ammonium carbamate, (P.), B., 76.

Krasnikov, A. See Seljakov, N.

Krasnosselski-Maximov, T. A., elasticity of cell membranes [of plants], A., 326.

Krasovskii, K., and Plissov, A., esters of dinitrobenzyl alcohol, A., 949.

Krasovskii, K., and Schenderovitch, F., action of sodium acetate on isobutylene dibromide and trimethylethylene dibromide, A., 1022.

Krastelevskii, W., essential oil of *Andropogon citratus* DC. from Sukhum [Caucasia], B., 340.

Krasylskii, K., yield of some essential oils from Sukhum [Caucasia], B., 310.

Krasylskii, K., and Kiprianov, A., condensation of phenylacetylene under the influence of primary amines, A., 158.

Kratky, A., cerium alloys for igniting purposes, (P.), B., 62.

Kraueh, E. See Badische Anilin- & Soda-Fabrik, and I. G. Farbenind. A.-G.

Krauer, R., sensitivity of diphenylamine as a reagent for nitric acid, B., 637.

Kraul, R. See Auwers, K. von.

Kraus, C. A., treating glass, (P.), B., 824.

Kraus, C. A., and Bullard, R. H., tin alkyl compounds. I. Some stannethanes. II. Trimethylbenzylstannane, A., 1028.

Kraus, C. A., and Rosen, R., reactions of compounds of triphenyl and triphenylsilicic in liquid ammonia, A., 57.

Kraus, C. A., and Whyte, E. F., potassium and sodium oxides, A., 921.

Kraus, E. J., iodometric determination of metals [lead, cadmium, and mercury], A., 592.

Kraus, F., recovery of hydrochloric acid from ferrous chloride liquor, (P.), B., 665.

Kraus, L., inactivation of persin by heat, A., 757.

Krause, A., system ferric sulphate-base, A., 633.

Krause, A. See also Chrzaszcz, T.

Krause, E., atomic refraction and atomic dispersion of mercury in mercury dimethyl and mercury diethyl, A., 718.

Krause, E., and Fromm, W., atomic refraction of zinc in its dialkyl compounds and preparation of homogeneous, mixed zinc dialkyls, A., 718.

Krause, E., and Grosse, A. von, complex compounds of tervalent thallium, A., 1112.

Krause, E., and Polack, H., preparation of homogeneous sodium triphenylboron and the compounds of triphenylboron with the other alkali metals, A., 628.

Krause, E., and Roessiger & Hasslacher Chemical Co., oxidation of ethyl alcohol to acetaldehyde, (P.), B., 609.

Krause, E. See also Holzverkohlungs-Ind. A.-G.

Krause, H., compounds of formaldehyde with glycine, A., 276.

Krause, H., deformation of ceramic masses on drying, B., 823.

Krause, R. J., heating, humidifying, and evaporating apparatus, (P.), B., 935.

Krauskopf, F. C., and Carter, A. S., crystallisation of metal lactates, A., 820.

Krauss, T., volatility of the compound of barium sulphate with sulphuric acid, A., 368.

Krauss, T., carbonising fuels, (P.), B., 117.

Krauss, J., determination of mercuriferous germicides in liquor used for pickling grain, B., 30.

Krauss, P. See Fromm, E.

Krauss, W. See Merck, E.

Krausze, W., optical behaviour of fibrous alumina, A., 352.

Kraut, H. See Frey, E. K., and Willstatter, R.

Krayash, H. R., Potter, G. F., Wentworth, S. W., Blood, P. T., and Sullivan, J. T., chemical constituents of fruit spurs associated with blossom bud formation in the apple, A., 1066.

Krayer, O., pharmacological properties of pure apocodeine, A., 431.

Krharma, I. J. See Williams, J. W.

Krebs, A. S., and Krebs Pigment & Chemical Co., calcining crude lithopone and other materials, (P.), B., 595.

Krebs, H. A. See Roma, P.

Krebs Pigment & Chemical Co. See Krebs, A. S.

Krecke, R. See Wedekind, E.

Krefft, H. E., Doppler effect in canal rays of hydrogen, oxygen, and nitrogen, A., 218.

Kreidl, I., manufacture of opacifiers for enamels, (P.), B., 323.

Kreidl, S., insecticide for plauts, (P.), B., 209.

Kreis, H., apparatus for the determination of water [in foodstuffs, fat, etc.], B., 338.

Kreisinger, H., Anderson, J., Bell, J. F., and International Combustion Engineering Corporation, burning pulverised fuel, (P.), B., 523.

Kreisinger, H., and International Combustion Engineering Corporation, fuel dryer, (P.), B., 117.

Kreisinger, H., pulverisation of coal, (P.), B., 306.

Kreisinger, H. See also International Combustion Engineering Corporation.

Kreisinger, V. See Jedlicka, V.

Kremann, R., and Baukova, O., electrolysis of molten alloys. XIII. Tin-cadmium alloys, A., 801.

Kremann, R., electrolysis of molten alloys. XV. Metal sulphides and phosphides, A., 802.

Kremann, R., and Bayer, K., electrolysis of molten alloys. XVI. Alloys of silver with tin, antimony, bismuth, and lead, A., 802.

Kremann, R., and Dellacher, J., electrolysis of molten alloys. XIV. Alloys of aluminium with magnesium, antimony, zinc, and silver, A., 802.

Kremann, R., and Hrasovec, A., electrolysis of molten alloys. X. Prevention of diffusion of metals in mercury by a direct electric current, A., 477.

Kremann, R., Krieghammer, H., and Gruber-Rehenburg, P., electrolysis of molten alloys. XI. Sodium-mercury alloys, A., 801.

Kremann, R., Krieghammer, H., and Troster, A., electrolysis of molten alloys. XII. Bismuth-tin alloys, A., 801.

Kremann, R., Weber, O., and Zeehner, K., influence of substitution in the components of binary solution equilibria. I. Binary systems of acids and amines, A., 393.

Kremann, R., and Zeehner, K., influence of substitution in the components of binary solution equilibria. XLVIII. Binary systems of azobenzene with acids, A., 394.

Kremann, R., influence of substitution in the components of binary solution equilibria. XLIX. Binary systems of cinnamaldehyde and salicylaldehyde with phenols, A., 396.

Kremers, H. C. See Thompson, A. P.

Kremers, R. E., aldehydes of peppermint oil, B., 462.

Kremers, R. E. See also Jenison, G. C.

Kremier, B., apparatus for sizing, dyeing, and impregnating paper, (P.), B., 661.

Krestinsky, W., action of phosphorus halides or halogen acids on acetylenic γ -glycols, A., 1121.

Kretov, A. E., preparation of cyanides from calcium cyanamide and dicyanodiamide, B., 1012.

Kretschmer, M., and Frieder, cholesterol in lead poisoning, A., 200.

Kretzer, H., opacifying enamels and glazes, (P.), B., 129.

Kreulen, D. J. W., examination of coal and grain size of samples for analysis, B., 3.

Kreulen, D. J. W., mixing of coal samples and methods of obtaining final samples, B., 3.

Kreulen, D. J. W., importance of combustibility of the coke in the combustion of solid fuels on the fire-grate; a new heat theory, B., 225.

Kreulen, D. J. W., behaviour of a coal of recent formation on prolonged heating at 110°, B., 394.

Kreulen, D. J. W., change in weight of coal during prolonged oxidation at low temperatures, B., 904.

Kreulen, D. J. W., coking capacity of coal, B., 937.

Kreulen, D. J. W., determination of volatile matter in solid fuels, B., 968.

Kreulen, D. J. W., determination of moisture in solid fuels, B., 969.

Kreulen, D. J. W., relation between the physical condition of coal samples and their adsorptive power, B., 1001.

Kreuzl, F. See Grün, A.

Krickhuhn, G., distilling crude tar oils, (P.), B., 148.

Krieghammer, H. See Kremann, R.

Krimberg, R., and Komarov, S. A., effect of the so-called carnosine fraction of meat extract on the secretion of the gastric glands, A., 752.

Krishnamurti, S., precipitation of cadmium sulphide from aqueous solutions of cadmium chloride in the presence of hydrochloric acid and other chlorides, A., 814.

Krishnan, K. S., are gaseous molecules oriented? A., 1080.

Krishnan, K. S. See also Raman, C. V.

Kriss, L., nephelometric determination of calcium and magnesium. II, A., 100.

Kriss, M. See Forbes, E. B.

Kristiansands Nikkelraffineringsverk. See Giertsen, S.

Kritshevsky, W., Prutzman, H. C., and Citron, W., deodorising kerosene, (P.), B., 6.

Krivobok, V. N. See Sanvren, A.

Kriwatschek, E. See Sari, P.

Kroeker, T., and Naamloose Venootschap Noury & Van der Lande Handelmaatschappij, treating [bleaching] flour, meal, or milling products, (P.), B., 106*.

Kröger, M., mechanism of chemical gas reactions, A., 41.
 aggregation and re-aggregation of raw rubber in the normal and deformed state, B., 137.
 physical and normal vulcanisation processes, their mutual dependence and their combination, B., 598.
 agglomeration density of rubber in relation to aggregation, vulcanisation, deformation, and temperature, B., 715.
 elastic properties of raw rubber in relation to packing density, B., 761.
 aggregation and re-aggregation of raw rubber in the presence of other substances, B., 797.

Kroepelin, H. See Freundlich, H.

Krolikowski, J. See Courtois, C.

Kroll, G., aluminium alloys, (P.), B., 245.

Kroll, W., desulphurisation of iron and steel, (P.), B., 162.
 aluminium alloy capable of being aged, B., 751.

Krollfischer, F. [with Schultze, H., and Sommermeyer, E.], 6-thiol-*m*-toluic acid, A., 166.

Kronig, R. de L., spinning electrons and the structure of spectra, A., 418.
 magnetic moment of the electron, A., 663.
 dielectric constant of diatomic dipole-gases on the new quantum mechanics, A., 993.
 dielectric constant of symmetrical polyatomic molecules on the new quantum mechanics, A., 1192.

Kronman, J. See Lachs, H.

Kronquest, J. C., and Acme Steel Co., treating [pickling] metal, (P.), B., 412.

Kropacsy, S. See Janke, A.

Kropp, W., Schranz, W., Schnleemann, W., and Winthrop Chemical Co., antihelminthic remedy, (P.), B., 721.

Kropp, W. See also Farbenfab. vorm. F. Bayer & Co.

Krüger, effect of plants on soil reaction and its importance in vegetation experiments, B., 207.

Krüger, D., particle size of wood cellulose, B., 45.

Krüger, D. See also Herzog, R. O.

Krüger, F., and Uetsch, O., ozone formation through electronic impact, A., 136.

Krüger, F. See also Menzel, H.

Krüger, F. von, filling of micro-burettes, A., 374.

Krüger, M., and Unkel, S. R., rendering common salt suitable for table and industrial use, (P.), B., 156.

Krull, H. See Schönberg, C.

Krung, C. See Ehrenberg, C.

Krug, R. See Dietzel, R.

Kruger, J. H. See Dutcher, R. A.

Kruger, M. See Naamli, Venoots. Matechu Maats. tot Exploit. van Chem. Uitwindingen.

Kruger, P. W., dental filling material, (P.), B., 609.

Kruglow, A. See Salkind, J.

Kruisheer, C. I., determination of sucrose and invert-sugar, and of glucose (starch) syrup in "stroop," B., 963.

Krupp, F., Grusonwerk A.-G., manufacture of [steel alloy] articles hardened in their marginal layers by nitrogenisation, (P.), B., 132.
 smelting reacting mixtures of oxides and sulphides in suspension, (P.), B., 134.
 apparatus for extraction of oil from blubber and other oil-containing cellular tissues, (P.), B., 200*.
 lixiviation or extraction of solid substances by means of volatile solvents, (P.), B., 649.
 treatment of complex ores and smelter products, (P.), B., 833.

Krupp, F., Grusonwerk A.-G., and Mittag, C., cooling and hydrating cement clinker from rotary kilns, (P.), B., 409.

Krupp, F., Grusonwerk A.-G., and Schottky, H., refining the grain of steel, (P.), B., 162.

Krupp, F., Grusonwerk A.-G. See also Strauss, B., and Ullrich, G.

Krupp, H., determination of the fertiliser requirements of soils by the Neubauer method, B., 1023.

Kruyse, P. J., determination of blood-sugar, A., 763.

Kruyt, H. R., measurement of the charge on colloidal particles, A., 122.

Kruyt, H. R., and Willigen, P. C. van der, stability of suspensions under influence of electrolyte mixtures, A., 1004.

Kryides, L. P. See Livingston, J. W.

Krzeczkowska, (Mu.) I. See Galecki, A.

Krzalka, H. See Badische Anilin- & Soda-Fab., and L. G. Farbenind. A.-G.

Ksanda, C. J. See Wyckoff, B. W. G.

Kubelka, V., and Tausig, I., adsorption and swelling, I., A., 900.

Kubelka, V., and Wagner, J., effect of gelatin on the decomposition of boiling aqueous solutions of hydrogen peroxide, A., 905.

determination of chromium in used chrome [tanning] liquors, B., 683.

electrometric determination of hydrogen-ion concentration in colloidal solutions, particularly tan liquors, B., 683.

Kubie, L. S., and Shultz, G. M., relationship of the constituents of blood and cerebrospinal fluid, A., 315.

Kublerschky, K., extraction of mixtures of oils and fats by means of alcohol, (P.), B., 287.

Kubota, B., and Hayashi, T., catalytic hydrogenation of the carbonyl group in aromatic compounds under pressure in presence of copper. I. and II., A., 520, 727, 1041.

Kubota, B., and Yoshikawa, K., toxicity of thiophen for nickel catalyst; action of the copper catalyst, A., 134*.

composition of reduced nickel as catalyst, A., 134*.

Kuchler, L., and Bodler, J., preservation of organic nitrogen compounds in liquid manure, (P.), B., 417.

Kuczyński, W. See Galecki, A.

Kudar, J., quantum theory of the doublet spectra and their anomalous Zeeman effects, A., 329.

correspondence principle and doublet spectra, A., 451.

Kudoh, K., preparing highly concentrated sulphur dioxide gas, (P.), B., 666.

manufacture of concentrated and fuming sulphuric acid, (P.), B., 787, 1012.

Kndrjavzeva, V. See Kusnetzov, V.

Kuechler, A. H., influence of ferric oxide and titanium oxide on pure clays, B., 361.

Kühl, G., pharmacological evaluation of atropine and scopolamine solutions, and of their stability, A., 212.

Kühl, H., Diesel oil, B., 939.

Kühl, H., and Adam, W., reducing conditions and colour changes in the burning of Portland cement, B., 879.

Kühl, H., and Klasse, F., rapid determination of lime in cement and raw materials for cement, B., 543.

Kühl, H., and Otto & Sons, A. T., cement and process of making it, (P.), B., 748*.

Kühlhing, H. E. See Rojahn, C. A.

Kühn, C., influence of number and size of particles on the covering power [of pigments], B., 287.

Kühn, M. See Brann, J. von.

Kuehn, P. M., and Bartlett-Hayward Co., gaseous-liquid contact apparatus [centrifugal gas washer], (P.), B., 39.

Kühnau, J., isolation of methylated guanidines from urine in parathyroid tetany, A., 196.
 detection of guanidine substances in the blood in parathyroid tetany and their simultaneous appearance in the urine, A., 1054.

Küll, F., pharmacological action of complex metallo compounds of the metal-ammonium type, A., 819.

Küll, F., and Pauls, J., pharmacological action of cesium salts, A., 319.

Kündig, F. jun. & Co., production of caffeine-free coffee, (P.), B., 297, 510*.

Klinzel, A., reversal of the double refraction of collagen fibres when treated with certain vegetable tannins, B., 249.

fine structure of the collagen fibre, B., 555.

Kirschner, K., is Kjeldahl's method for the determination of nitrogen in organic substances generally applicable? A., 702.

Kirschner, K., and Seharrer, X., use of powdered copper in analytical chemistry; [determination of nitrogen, nitrate, chlorate, and perchlorate], A., 490.

Küster, K. H. See Chem. Fabr. Griesheim-Elektron.

Küster, K., haemochromogen and haemoglobin, A., 315.

Küster, K., basic character of haemin, A., 749.

Küster, W. [with Erfe, E., Roll, E. von, and Schiller, K.], complex ferro-salts, A., 821.

Küster, W. [with Schmid, G., Ruff, W., Heess, W., and Hnttenlocher, R.], blood, IV. Origin of haemins from haemoglobin-A, and the existence of two forms of haemoglobin, Aa and Ab, A., 315.

Küster, W., and Erfe, E., derivatives of acetylpyruvico acid and ethoxalylacet-methylanilide, A., 713.

Küster, W., Maurer, H., and Palm, A., derivatives of ethyl β -acetyl- α -methyl-succinate; constitution of hematoporphyrin, A., 713, 1024.

Küster, W., and Müller, A., porphyrins. X. Hematoporphyrin monomethyl ether, A., 748.

Küster, W., and Ruff, W., action of benzoyl peroxide on a dimethyl(chloro)-haemin, A., 313.

Küster, W., and Schnitzler, E., lignin, B., 151.

Küster, W., and Zimmermann, W., porphyrins. IX. Dichlorohemato porphyrin dimethyl ether, a di- and a tri-chlorometaporphyrin dimethyl ether, A., 748.

Küster, W. See also Hans, R.

Küttner, F., manufacture of viscose artificial silk, (P.), B., 48.

Kufferath, H., chemical, microscopical, and bacteriological study of infant foods, B., 509.

Kugelmann, B. See Kalk, H.

Kuhlmann, J., and Grossfeld, J., detection and determination of coconut oil and milk fat in cacao butter, B., 165.

examination of confectionery products containing sugar and milk or cream, B., 252.

milk-fat determination in foodstuffs, B., 252.

new value for milk-fat, B., 447.

Kuhlmann, J. See also Baumann, C.

Kuhn, A., measurement of particle size, A., 122.

Kuhn, A., and Pirsch, H., colloid chemistry of bismuth and its compounds, A., 21.

Kuhn, A., and Richter, G., colloid chemistry in wheat gluten, B., 845.

Kuhn, B. See Fischer, H. O. L.

Kuhn, H., absorption spectra and heat of dissociation of halogen molecules, A., 1192.

Kuhn, J. R., and Ellis, C., acid-resistant shellac substitute, (P.), B., 99.

Kuhn, R., and Braun, L., relationship of the catalytic and peroxydatic action of iron to its mode of combination, A., 1215.

Kuhn, R., and Gruntherr, G. E. von, constitution of melezitose and turanose, A., 1127.

Kuhn, R., and Ziese, W., location of the glucose residues in starch; degradation of monomethyltrihexosyl- β -D-methylglucose, A., 1230.

Kuhn, R., and Zumstein, F., stereochemistry of the tetrahedral carbon atom. III. Configuration of the diaminosuccinic acids, II., A., 505.

stereochemistry of aromatic compounds. II. Dissociation constants of aromatic diamines and the spatial configuration of benzidine, A., 513.

Kuhn, W., thermochromic equilibrium from the kinetic and photochemical points of view, A., 680.

decomposition of aminoids by ultra-violet radiations, A., 920.

width of the absorption lines in sodium vapour, A., 985.

Kuhnhert, manuring straw crops with increasing amounts of sodium nitrate, B., 959.

Kulas, C., and Pauling, C., manufacture of resinous products of condensation from phenol and formaldehyde, (P.), B., 502*.

manufacture of "resites" by the condensation of phenols and aldehydes, (P.), B., 890.

Kulenkampff, H., comparison of the energy and the ionisation produced in air by X -rays of different wave-lengths, A., 456.

ionisation of air by means of X - and cathode-rays, A., 769.

Knikowa, L. See Lukirska, P.

Kullgren, C., change of alkalinity of liquor during cooking of soda- and sulphate-cellulose, B., 187.

absorption of sodium hydroxide from the solutions and from "black liquor" by sulphate-cellulose, B., 435.

Kulp, W. L., indole, A., 435.

Kultjugin, A., catalase property of haemoglobin, A., 432.

loss of catalase activity of blood on keeping, A., 432.

Kultjugin, A., and Gabarev, E., micro-determination of nitrogen, A., 327.

Kultjugin, A., and Ivanovski, H., micro-determination of nitrogen, A., 444.

Kultjugin, A. See also Bach, A.

Kulvartska, R. See Frumkin, A.

Kumagal, N. See Asagoe, K.

Kummer, M. von. See Meisenheimer, J.

Kumpf, W. See Schlack, P.

Kuneralwerke *E. Khuner & Sohn A.-G.*, simultaneous purification and deacidification of oils and fats, (P.), B., 500.

Kung, reserves obtained by means of algin, B., 784.

Kunitz, *M.*, empirical viscosity formula, A., 1005.

Kunitz, *M.*, See also Northrop, *J. H.*

Knusman, *C. H.*, new source of positive ions, A., 218.

thermionic properties of some mixtures used as catalysts in the synthesis of ammonia, A., 685.

Kunzman, *C. H.*, See also Barton, *H. A.*

Kunstharzfabr. Regal & Co., See Singer, *R.*

Kunstler, *J.*, [apparatus for] preserving sea-water for biological purposes, (P.), B., 966.

Kunz, *A.*, salicin. I. Exceptional rotations of the halogenotetra-acetyl derivatives of salicin; synthesis of salicin, A., 275.

Kunz, *A.*, and Hudson, *C. S.*, relation between rotatory power and structure in the sugar group. XV. Conversion of lactose into another disaccharide, neolactose; the chlorohepta-acetate and two octa-acetates of neolactose, A., 941.

relation between rotatory power and structure in the sugar group. XVII. Structure of neolactose, A., 1127.

Kunz, *J.*, recent determinations of the magneton, A., 1075.

Kunz, *J.*, Taylor, *J. B.*, and Rodebush, *W. H.*, magnetic properties of atoms, A., 990.

Kunz, *J.*, See also Tykociner, *J. J.*

Kunze, *K.*, cyclohexylidenehexanone, A., 1143.

Kunze, *K.*, See also Vorländer, *D.*

Kunze, *O.*, production of discharge by means of hyposulphites, (P.), B., 786.

materials for coating walls, (P.), B., 981*.

Kunze, *P.*, spark line 4636 of Fe^{+} , A., 649.

Kunze, *W.*, electric furnace with electrodes arranged in the region of the furnace hearth, (P.), B., 66.

Kupelwieser, *E.*, Navratil, *E.*, and Wilhelm, *I.*, detection of enzymic processes conditioned by immunisation. III. and IV., A., 86.

Kureenok, *P.*, utilisation of the nitrogen of peat by plants, B., 416.

Kurbatov, *S.*, new Russian occurrence of vanadium and uranium minerals, A., 1022.

Kuriyama, *I.*, See Chikashige, *M.*

Kuroda, *T.*, effect of hydrogen-ion concentration on the antiseptic action of certain phenols and aromatic acids, A., 541.

action of *o*-, *m*-, and *p*-chlorophenol, A., 756.

Kurokawa, *M.*, orifices of atmospheric gas burners, B., 730.

Kurelmeyer, *B.*, use of arcs and other fluctuating sources in photoelectric photometry, A., 933.

Kursanov, *D.*, See Namekin, *S.*

Kurchatov, *T.*, and Shmeilnik, *K.*, transmission of low-velocity electrons through thin metallic foils, A., 989.

Kurz, *O.*, See Metallbank & Metallurgische Ges. A.-G.

Kuschmann, *J.*, See Ruer, *R.*

Kusenak, *W.*, See Pringsheim, *H.*

Kuznetsov, *V.*, potential distribution in a layer of a liquid dielectric medium, A., 248.

conductivity of toluene, A., 359.

Kuznetsov, *V.*, and Kudrjavzeva, *V.*, passage of metallic ions through liquid dielectric media, A., 247.

Kuznetsov, *W. J.*, influence of salts on the crystallisation of sugar, B., 336.

Kuss, *E.*, See Badische Anilin- & Soda-Fab.

Kusserow, *R.*, process of making compressed yeast, (P.), B., 563.

Kutschner, *F.*, and Ackermann, *D.*, comparative physiology of animal extractives and alkaloids, A., 316.

Kutter, *F.*, See Eder, *R.*

Kuyama, *T.*, See Fukuda, *M.*

Kuyiman, *H. A.*, See Kolthoff, *I. M.*

Kuyper, *H. A.*, behaviour of oxygen according to the law of corresponding states, A., 570.

Kwei, *C. T.*, characteristics and spectra of low-voltage arcs in hydrogen, nitrogen, and mixtures of hydrogen with mercury and nitrogen, A., 7.

excitation of the ultra-violet band of ammonia, A., 1192.

Kwei, *C. T.*, See also Eckart, *C.*

Kyber, *W.*, manufacture of phosphoric acid and generator gas, (P.), B., 664.

Kyber, *W.*, and Britzke, *E.*, manufacture of phosphoric acid and generator gas, (P.), B., 664.

Kylin, *E.*, calcium of the blood. VIII. Calcium content of the blood in diabetes mellitus, A., 1169.

potassium and calcium content and ratio in blood-serum in physiological and pathological conditions. X. The adrenal reaction, A., 1053.

yellow chromatophoric pigments of the higher plants, A., 1183.

Kyropoulos, *S.*, production of large crystals, A., 926.

coating iron and iron alloys with chromium, (P.), B., 711.

Kyser, *E. V.*, and Vilbrant, *F. C.*, critical points of emulsification in oil-soap emulsions, B., 795.

L.

Laabs, *W.*, and Allbright-Nell Co., rendering fat- and oil-containing solids of animal origin, (P.), B., 449.

Laage, *E.*, See Stoerner, *R.*

Laar, *J. J. van*, critical temperatures and pressures of alkali halides; molecular surface tension and its temperature coefficient, A., 341.

relation of the internal latent heat of evaporation to the molecular surface energy, in connexion with the modified law of corresponding states, A., 343.

equation of state of solid substances (metals) in connexion with their compressibility and with the pressure and temperature coefficient of this quantity, A., 570.

equation of state of solid substances in connexion with the general expression for the energy, A., 894.

equation of state of solid substances in connexion with the general expression for the energy and the entropy; simple derivation of the so-called entropy constant, A., 1088.

Laar, *J. J. van*, and Lorenz, *R.*, theory of *E.M.F.* in condensed systems, A., 478.

Laar, *J. J. van*, See also Lorenz, *R.*

La Barre, *J.*, inactivation of atropine sulphate by rabbit serum, A., 92.

Labbe, *A. L.*, and American Smelting and Refining Co., composition for electric insulators, (P.), B., 138.

Laborde, *A.*, See Pilon, *H.*

Laborde, *E.*, Bressolles, *J.*, and Jaloustre, *L.*, influence of some radioactive elements on the catalytic activity of certain proteobismuthic precipitates, A., 919.

Labouhére, *A.*, See Waser, *E.*

La Bour, *H. F.*, concentrating and purifying phosphoric acid, (P.), B., 916.

Lachmann, *F.*, See Blitz, *H.*, and Lachs, *H.*

Lachmann, *H.*, See Seek, *W.*, and Stoerner, *R.*

Lachs, *A.*, See Dilthey, *W.*

Lachs, *H.*, and Kronman, *J.*, streaming potentials, A., 803.

Lachs, *H.*, and Lachmann, *F.*, coagulating power of ions of the same valency and their radii; heat of adsorption of electrolytes, A., 1099.

Lacroix, *A.*, meteorite (enite) fallen in the Haute-Volta on June 27th, 1924, A., 42.

leucitic rocks; syenitic group, A., 379.

aerolith discovered in the department of the Côte-d'Or; classification and nomenclature of the chondrites, A., 816.

Lactein Co., See Long, *M. P.*

Ladenburg, *R.*, diamagnetic and paramagnetic rotation of the plane of polarisation, A., 110.

Ladenburg, *R.*, Kopfermann, *H.*, and Carst, (Frl.) *A.*, anomalous dispersion of excited gases, A., 994.

Ladenburg, *R.*, See also Kopfermann, *H.*

Läutenschläger, *L.*, See Farbw. vorm. Meister, Lucius, & Brinling.

Lafeuille, *F.*, apparatus for evaporating and crystallising sugar and other solutions, (P.), B., 928.

crystallisation of sugar solutions, etc., (P.), B., 992.

Lafitte, *P.*, explosion wave and detonation wave, B., 110.

Lafitte, *P.*, See also Dumanois, *P.*

Lagerqvist, *J.*, and Fredman, *M.*, determination of the melting points of asphalts, 1., B., 261.

Lagneau, *C.*, volatile acidity of wines, B., 508.

Lagrave, *R.*, See Levy, *J.*

Lahey, *F. T.*, utilisation of rubber-bearing plants, (P.), B., 957.

vulcanisable plastic material, (P.), B., 957.

Lahey, *J. A.*, and Vulcan Defining Co., separation and recovery of arsenic and/or antimony and tin, (P.), B., 360.

Lahousse, *J. E. G.*, and Société Fabr. Sole "Rhodiaseta," manufacture of artificial silk and of artificial threads or filaments, (P.), B., 580.

Lain, *A. E.*, cellulose nitrate lacquers, B., 373.

Laing, *A.*, liquid fuel furnaces, (P.), B., 600*.

Laing, *B.*, and Nielsen, *H.*, distillation of carbonaceous materials, (P.), B., 118.

purification, cleansing or washing of carbonaceous and other materials, (P.), B., 620.

Laing, *B.*, See also Nielsen, *H.*

Laing, *M. E.*, unstable states of solutions of sodium behenate, A., 241.

L'Air Liquide, Société Anonyme pour l'Étude et l'Exploitation des Proc. G. Claude, [liberation of hydrogen and methane in the] distillation of coal, (P.), B., 350.

improvement of coke, (P.), B., 573.

purification of hydrogen [for making synthetic ammonia], (P.), B., 1916.

Laise, *C. A.*, and Electron Relay Co., body of high electron and light emission, (P.), B., 198.

Laissez, *J.*, cementation of ferrous alloys by tungsten, B., 278, 633.

cementation of ferrous alloys by chromium, B., 443.

cementation of ferrous and cuprous alloys by tungsten, molybdenum, and tantalum, B., 545.

Laist, *F.*, Frick, *F. F.*, and Anaconda Copper Mining Co., electrolytic precipitation of copper, (P.), B., 648.

Lal, *R. B.*, See Bhatnagar, *S. S.*

Lamb, *M. C.*, dyeing of leather, (P.), B., 839.

Lamb, *M. C.*, and Spence & Sons, Ltd., *P.*, finishing and colouring of leather, (P.), B., 926.

Lamberg, *M.*, manuring of potatoes, B., 959.

Lambert, *A.*, treatment of natural alkali salts of secondary and tertiary origin, (P.), B., 321.

Lambert, *B.*, and Hume-Rothery, *W.*, precipitated solids. I. Strontium sulphate, A., 1209.

Lambert, *B.*, and Schaffer, *R. J.*, precipitated solids. II. Calcium sulphate, A., 1209.

Lambert, *E.*, and Matthews, *W. E.*, producing paper pulp, (P.), B., 534.

Lambert, *R. H.*, ternary system silver bromide-potassium bromide-water, A., 799.

Lambert Thorp Co., See Thorp, *L.*

Lamble, *C. G.*, utilisation of insulin and dextrose; effect of anaesthetics and pituitrin, A., 869.

Lamble, *C. G.*, See also Kermack, *W. O.*

Lamble, *A.*, and United Alkali Co., stabilising bleaching powder, (P.), B., 52.

Lambrette, *A.*, drying or chemically treating continuous lengths of fabric or paper, (P.), B., 740*.

Lammering, *D.*, See Chem. Fabr. von Heyden A.-G.

Lammert, *(Mits.) O. M.*, See Morgan, *J. L. R.*

Lampe, *W.*, activity of the active substance of the posterior lobe of the human pituitary gland, B., 390.

Lampe, *W.*, and Rössler, *R.*, simple mixing apparatus for water-bath, A., 932.

Lampitt, *L. H.*, Hughes, *E. B.*, Bilham, *P.*, and Fuller, *C. H. F.*, determination of copper in foodstuffs, B., 719.

Lamplough, *F.*, and Ratoczy Extended Oil Fields, Ltd., conversion of heavy hydrocarbon oils into light hydrocarbon oils, (P.), B., 972.

Lanson, *P. D.*, and Wing, *R.*, effect of carbon tetrachloride and of alcohol on acid-base balance of the blood, A., 1058.

blood fibrin and levulose tolerance in acute and chronic carbon tetrachloride intoxication, A., 1172.

Lamy-Torrilhon, *H. M.*, refining or separating volatile constituents from materials, (deodorising oils), (P.), B., 89, 714*.

Lancaster, *H. M.*, influence of soil, season, and manuring on the 1924 barley crop as indicated by the mists made therefrom, B., 103.

Lance, *R. D.*, zinc white, (P.), B., 288.

method of operating blast furnaces, (P.), B., 548.

Lancesseur, *E.*, See Deriveau, *P.*

Landé, *A.*, quantum theory of radiation, A., 221.

Landesén, *G.*, potassium and sodium pallado-oxalate, A., 698.

Landis, W. S., Buchanan, G. H., and American Cyanamid Co., process of fumigating, (P.), B., 30.

Landrieu, P., calorimetric bomb, B., 34.

Landsberg, F., pre-drying and pre-distilling gas-producer fuels by hot gases, (P.), B., 309.

simplified method of evaluation of coals, B., 426.

Landt, E., and Volmer, M., rate of spreading of oil on water, A., 1094.

Landwirtschaftliche Warenzentrale A.-G., decomposition of raw phosphates, (P.), B., 843.

Lanfray, M. P., and Brandenberger, J. E., manufacture of artificial silk, (P.), B., 912.

Lang, A., liquid fuel burners, (P.), B., 1000*.

Lang, A. See Kögler, F., and Vas, M.

Lang, I. See Weinland, R.

Lang, R., catalysis of the reaction between arsenious acid and permanganic acid and its analytical application, A., 581.

simple comparison electrodes for electrometric determinations with permanganic, A., 1116.

Lang, R. J., series spectra of the first long period, A., 874.

Lang, R. J., and Smith, S., greater dispersion in the extreme ultra-violet, A., 610.

Lang, R. J. See also Smith, S.

Langbein, J., mixture for use as a cement cold-glaze, (P.), B., 918.

Langbein-Pfanhauser-Werke A.-G., production of thick adherent deposits of electrolytic nickel on aluminium, (P.), B., 197.

Langbein-Pfanhauser-Werke A.-G. See also Pfanhauser, W. A. F.

Lange, A. See Berl, E.

Lange, A. R., characteristics of fish and allied oils, B., 199.

Lange, E., and Dürre, F., heat of solution of gypsum at the maximum solubility, A., 29.

thermochemical examination of existence of metastable alkali halides, A., 341.

Lange, E., and Schwartz, E., potentiometric titration of bromide and chloride, A., 701.

Lange, F., and Steinel, P., steel-like alloy for church bells, (P.), B., 444.

Lange, F. See also Badische Anilin- & Soda-Fab., and Simon, F.

Lange, H., and Specht, H., carbohydrate metabolism in experimental ileus, A., 1169.

Lange, H. See also Lange, V.

Lange, N. A., interaction of isocyanic acid and isocyanates [carbimides] with some alkyl and aryl Schiff bases and with hydrazones; addition to the OH:N linking, A., 1168.

Lange, N. A., and Reed, W. R., *p*-phenoxy carbamides and thiocarbamides derived from *p*-phenoxyaniline; effect of the phenoxy-group on taste, A., 606.

Lange, V., impregnating textile fabrics, ropes, etc., (P.), B., 122*.

Lange, V., and Lange, H., vehicle for colouring matters and graphite, (P.), B., 796.

Lange, W., determination of manurial requirements of soils by means of plant and soil analyses, B., 1023.

Lange, W. See also Akt.-Ges. für Anilin-Fab.

Lange, Werner. See Schwalbe, C. G.

Lange, Willy, cupro-amine compounds, A., 1112, 1216.

Lange, Willy. See also Trampe, W.

Langecker, H., and Stross, W., measurement of the action of insulin, A., 205.

Langer, H., and Wiechowski, W., pancreatic hormone, A., 205.

Langer, E. O., reversal process for photographic development emulsions, (P.), B., 109.

Langer, H. See Akt.-Ges. für Anilin-Fab.

Langguth, E., lead and silver from lead-zinc sulphide ores, (P.), B., 952.

Langmuir, I., scattering of electrons in ionised gases, A., 3.

distribution and orientation of molecules, A., 1003.

flame of atomic hydrogen, B., 649, 650.

Langmuir, I., and General Electric Co., high-frequency apparatus and method of heating, (P.), B., 551.

Langmuir, I. See also British Thomson-Houston Co., Ltd., and Welman, R. A.

Langseth, A., determination of the configuration of geometrically isomeric carbon compounds, A., 116.

Langstaff, E. See Watson, A. F.

Langstein, E. See Wolf, Kuno.

Langwell, H., fermenting cellulose materials, (P.), B., 459.

Lanhofer, I. E., cement-roasting apparatus, (P.), B., 480*.

Lanhofer, I. E., Lanhofer, O. E., and Dannenberg, S. J., producing homogeneous, mouldable powders from fibrous [asbestos] cements, (P.), B., 441*.

Lanhofer, O. E. See Lanhofer, I. E.

Lansing, W. D. See Phipps, T. E.

Lantz, L. See Manufacture E. Zundel.

Lantz, L. A. See Calico Printers' Assoc., Ltd.

Lantz, M., manufacture of cement, (P.), B., 363.

Lantz, R., and Wahl, A. R., synthesis of phenylrosinduline, A., 530.

new derivatives of naphthoquinones, A., 617.

Lantz, R. See also Wahl, A. R.

Lanz, H. See Sipp, K.

Laporte, M., mobility of gaseous ions, A., 449.

mobility of ions in gases, A., 653, 877.

Laporte, M., and Da Silva, M. A., mobility of negative ions and ionisation currents in pure argon, A., 877.

Laporte, O., fundamental level of the iron atom, A., 650.

series and ionisation potentials in the iron spectrum, A., 988.

term regularities in the arc spectrum of tungsten, A., 1071.

ground terms of the spectra of the first and second long periods, A., 1185.

Laporte, O., and Meggers, W. F., rules of spectral structure, A., 215.

Laporte, O. See also Kiess, C. C., and Meggers, W. F.

Laporte, Ltd. B. See Weber, J. E.

Lapp, C. V., Rogers, R. A., and Hopkins, B. S., element 61 [illinium], A., 1083.

new X-ray lines in certain rare-earth samples, A., 1194.

Lape, F. See Badische Anilin- & Soda-Fab.

Laponi, D., lipolytic activity of serum and the precipitin reaction of Sachse-Georgi, A., 1051.

Laporte, H. G., and Metals Refining Corporation, purifying molten metals, (P.), B., 444.

Lapworth, A. See Burkhardt, G. N., and Haworth, R. D.

Laqueur, E., Hart, P. C., De Jongh, S. E., and Wijsenbeek, I. A., preparation of the hormone of the oestrous cycle and its chemical and pharmacological properties, A., 546.

Laqueur, E. See also Dingemans, E., and Grevenskut, A.

Larmor, (Sir) J., law of inertia for radiating masses, A., 333.

early history of gaseous adsorption, A., 1118.

La Rotonda, C. See De Dominicis, A.

La Rotonda, L. See De Dominicis, A.

Larrove Construction Co. See Crofoot, E. H.

Larsen, E. S., identity of ectropite and bentonite, A., 709.

Larsen, E. S., and Berman, H., identity of glauconite and johannite, A., 710.

Larsen, E. S., and Wherry, E. T., beidellite, a new mineral name, A., 143.

Larsson, E., electrolytic dissociation of dibasic acids. III. Determination of the second dissociation constant from solubility experiments, A., 1007.

Larsson, T., and Norton Co., continuous drying kiln and method of drying ware, (P.), B., 114.

La Rue, J. B. See Scoville, S. W.

Lasarev, P., relationship between hardness and the thermal and optical properties of elements, A., 116.

relations between the velocity of photochemical reactions and wave-length, A., 584.

law of photochemical equivalence, A., 919.

Lasausse, E., preserved pens in relation to their diameter, B., 382, 644.

Lasch, F., comparative actions of several local anaesthetics on the heart and intestine, A., 201.

Lasch, F., and Brügel, S., absorption from the isolated, surviving intestine. III. Influence of saponin on the resorption of sugar solutions, A., 972.

Lasch, F. See also Wasiolek, R.

Lasch, G. See Reitstötter, J.

Lasche, O., Geisen, C., and Kohlenveredlung Gesellschaft, oven for the distillation of solid material, (P.), B., 396.

Lasche, O., and Kohlenveredlung Gesellschaft, distillation of solid [bituminous] material, (P.), B., 732.

Laska, A. L. See Chem. Fabr. Griesheim-Elektron.

Lasker, M. See Harris, M. M.

Laski, G. See Herzog, R. O.

Lasnitzi, A. See Roma, P.

La Soie d'Aubenton Co., treating soda solutions contaminated with cellulose-like substances, (P.), B., 978.

Lasselle, P. A. See Tanner, H. G., and Williams, R. J.

Lassen, F., pasteurising liquids [beer], (P.), B., 381*.

Lassieur, A., precipitation of magnesium with aluminium hydroxide, A., 376, 491.

electrolytic separations by graded potentials, A., 1013.

Lassieur, A. See also Kling, A.

László, B. See Diache, Z., and Lieben, F.

László, E., Bergin benzine and Bergin oil, B., 523.

László, F. See Lieben, F.

Latex Developments, Ltd., and Russell, R., waterproof paints, (P.), B., 137.

Lathrop, E. C., and Munroe, T. B., preparing and preserving fibres for pulp making, (P.), B., 315.

preserving fibres for pulp making, (P.), B., 315.

Lathrop, E. C. See also Bassett, H. P.

Latimer, W. M., energy of solution of gaseous ions in relation to the effect of a charge on the dielectric, A., 684.

Latimer, W. M., and Buffington, R. M., entropy of aqueous ions, A., 1102.

Latimer, W. M., and Hoenshel, H. D., heat capacity and entropy of lead bromide and bromine, A., 232.

Latimer, W. M. See also Buffington, R. M.

Latimer Chemical Co. See Goodwin, H. B.

Lattes, (Mme.) J. S., investigation of the primary and secondary β -radiation from radium by the absorption method, A., 880.

Lattes, (Mme.) J. S., and Fournier, G., absorption of β -rays by matter, A., 5, 105.

Lattey, R. T., dielectric constants of solutions of electrolytes, A., 350.

Lattey, W. T., leather japping, B., 377.

Lau, E. See Jancke, L.

Lau, F., refining of precious metal residues, (P.), B., 61.

Laubender, W., metabolism under reduced atmospheric pressure. I. Gas metabolism and protein metabolism, A., 84.

metabolism under reduced atmospheric pressure. II. Behaviour of blood and of liver, A., 109.

Laubengayer, A. W., and Corey, R. B., germanium. XIII. Vacuum apparatus for the purification and study of volatile compounds of germanium, A., 931.

Laubengayer, A. W., and Tabern, D. L., germanium. XIV. Germanium tetrachloride, A., 1088.

Laue, M. von, X-ray interference in mixed crystals, A., 12.

Lauer, W. M., constitution of tribromopbenol bromide and its congeners, A., 514.

Laughlin, W. C., and Laughlin Filter Corporation, centrifugal separator, (P.), B., 344, 346*.

machine for continuous separation of solids from liquids or liquids from solids, (P.), B., 568.

Laughlin, W. C. See also Laughlin Filter Corporation.

Laughlin Filter Corporation, and Laughlin, W. C., centrifugal separators for separating solids from liquids, (P.), B., 255.

Laughlin Filter Corporation. See also Laughlin, W. C.

Laughton, N. B. See Bourquin, H., and James, A. A.

Laurens, H. See Mayerson, H. S.

Laurent, J., ovens or kilns [for ceramic ware, etc.], (P.), B., 489.

Laurie, A. P., preservation of stone, (P.), B., 15*, 514*.

yellowing of oil films and change of refractive index of linseed oil on drying, B., 755.

change of refractive index of linseed oil in the process of drying and its effect on the deterioration of oil paintings, B., 755.

Lauritzen, C. M. See Raymond Bros. Impact Pulverizer Co.

Lauscha, J. See Mühlauer, J.

Lauter, W. See Meisenheimer, J.

Lauth, H. See Heller, G.

Lava, V. G., possible use of Philippino coals for liquid fuel, B., 82.

Lavaud, J. R., reducing the inflammability of nitrocellulose threads, (P.), B., 483.

process for rendering nitrocellulose yarns incombustible, (P.), B., 627*.

Lavene, H. A., and Acheson Graphite Co., impregnated electrode for furnace work, (P.), B., 164.

Laves, O., conservation of red corpuscles *in vitro* and selective sensitivity to poisons, A., 191.

Lavirote, F., obtaining petrolatum oils, petrolatum, and paraffin, (P.), B., 40.

manufacture of petrolatum and petrolatum oils, (P.), B., 1005.

Lavrov, D. M., influence of lecithins on the action of drugs. VI., A., 201.

Lawaczeck, F., electrolytic apparatus, (P.), B., 985.

Lawaczeck, H., hexososphoric acid in normal and diabetic blood and its behaviour towards adrenaline and insulin, A., 752.

Lawrence, E., photo-electric effect in potassium vapour, A., 1073.

Lawrie, J. W., and Du Pont de Nemours & Co., E. I., purification of lactic acid, (P.), B., 898.

Lawrie, L. G., use of the microscope in the textile laboratory, B., 355.

Lawrie, L. G. See also British Dyestuffs Corp. Ltd.

Lawson, C. C. See Schairer, J. F.

Lawson, R. W., energy liberated by radium, A., 5.

Lawson, R. W. See also Holmes, A.

Lawson, W. E., and Reid, E. E., reactions of $\beta\beta'$ -dichloroethyl sulphide with amino-compounds, A., 80.

Latxon, F. C., Pridaux, E. B. R., and Radford, W. H., colorimetric dissociation constants of 3 : 5-dinitroprocatadol and 4 : 6-dinitroresorcinol, A., 28.

Laycock, J. F. See Appleyard, K. C.

Lazier, W. A., and Adkins, H., adsorption of ethylene and hydrogen by zinc oxide, iron oxide, nickel, and copper, A., 467.

formation of carbon dioxide from alcohols, A., 918.

Lazier, W. A. See also Adkins, H.

L'Azote Français, Société Anonyme, production of nitrogen peroxide from calcium nitrate, (P.), B., 322.

Lazote, Inc. See Claude, G.

Lea, F. M., See Carter, S. R.

Lea, H. T., and Humphrey, C. W., aluminium chloride process, (P.), B., 89.

Lea, T. R., and Robinson, R., relative directive powers of groups of the forms RO and RR'N in aromatic substitution. V. Nitration of *p*-methoxydiphenyl ether, A., 397.

fission of methoxydiphenyl ether, A., 1144.

Leach, B. R., arsenates as soil insecticides, B., 840.

Leach, L. See Schwartz, F.

Leaming, T. H. See Derick, C. G.

Leavenworth, C. S. See Vickery, H. B.

Lebeau, P., gas analysis, B., 35.

gases and the carbonisation of fuels, B., 521.

Lebeau, P., and Damiens, A., simple preparation of fluorine, A., 139.

carbon tetrafluoride, A., 710.

Lebeau, P., and Marmasse, P., determination of small quantities of hydrogen in gaseous mixtures, B., 538.

Lebeau, P. M. A., manufacture of active charcoal, (P.), B., 228.

Lebedev, A., formation of acetyl methylcarbinol and $\beta\beta'$ -butyleneglycol, A., 324.

action of oxydoreductase on methylglyoxal, A., 540.

zymase production and co-enzyme activity, A., 544.

separation of the oxydoreductase from the zymase complex. I., A., 1061.

function of phosphates in the dissimilation of hexoses, A., 1227.

oxydoreductase of yeast, A., 1276.

Lebedev, S. V., and Platnov, M., monothio- and dithio-triacetaldehyde, A., 599.

Lebediantz, A. N., reciprocal action of ground phosphorite and soils not having an acid reaction, B., 169.

Leber, A. See Manchot, W.

Leblanc, C. L., Leblanc, A. M., and Société Anonyme pour l'Exploit. des Proc. Maurice Leblanc-Vickers, refrigeration, (P.), B., 507.

Le Blanc, M., and Sachse, H., preparation of pure nickel monoxide, A., 373.

black nickel oxide, A., 698.

Lebo, R. B. See Mann, M. D., *jun.*

Le Boucher, L., determination of potassium by the cobaltinitrite method, A., 491.

cobalt nitrite, A., 588.

Le Breton, E. See Kahn, M.

Le Bris, G., electrolytic deposition of chromium, (P.), B., 163, 673.

Lechat, M., binary azeotropes. II., A., 1199.

Le Chatelier, F. See Portevin, A.

Le Chatelier, H., theory of shaft furnaces, B., 391.

Leche, S. See Denis, W.

Lecher, H., and Holschneider, F., preparation of phenylsulphur chloride (chlorothiobenzene) and its homologues, (P.), B., 386.

Lecher, H., and Seiffken, W., nitroyl derivatives of bivalent sulphur. I. Nitrosyl-ethylmercaptide, A., 819.

Lechner, O., investigations on [cupola] burdens with briquettes of cast-iron and rusted and unrust steel, B., 15.

Lecomber, L. V., and Probert, M. E., chemical analysis of cotton; identification of the fatty ingredients in sized goods, B., 150.

chemical analysis of cotton; waxes of cottons of different origin and their characteristics, B., 150.

Lecomte, J., infra-red absorption spectra of cyclic derivatives, A., 834.

Lecon, R. See Randoi, L.

Le Contre, F. C. F., and Société d'Etude des Agglomérés, refractory cement with a base of zirconium ore, (P.), B., 91*.

Le Châvre Natif, recuperation of metals contained, in the form of silicates, in waste products [slags], (P.), B., 635*.

Leisbury, W., and Blair, E. W., partial formaldehyde vapour pressures of aqueous solutions of formaldehyde. II., A., 235.

Leisbury, W., and Taylor, R., formaldehyde-sodium bisulphite and formaldehyde-sulphurous acid; determination and properties, B., 511.

Leider, A., and Westinghouse Lamp Co., method of working refractory metals, (P.), B., 756*.

Leider, O., and Stanczak, W., manufacture of alumina salts from alumina-silicate and mineral containing alumina, (P.), B., 980.

Lederwerke M. Zimmer A.-G. See Zimmer, F.

Ledin, J. A., turbidity tests on butter fat and its substitutes, B., 895.

Lee, A. R. See Hoagland, R.

Lee, B., plant cuticle. II., A., 99.

Lee, C. See Peters, J. P.

Lee, D. C. See Sauveur, A.

Lee, I. E. See Fall, P. H.

Lee, J. H., and Studebaker Corp., cleaning metal [iron and steel] by electrolysis, (P.), B., 1018.

Lee, J. van der, preparation of indole from $\alpha\omega$ -dinitrostyrene, A., 179.

derivatives of some halogeno- and halogeno-nitro-benzaldehydes, A., 519.

Iodoform reaction for acetone and ethyl alcohol, A., 1125.

nitration of cinnamic acid derivatives, A., 1245.

Lee, L. E., apparatus for distilling oils, (P.), B., 780.

Lee, P. W., influence of composition of body and glaze on the physical properties of a true porcelain, B., 361.

Lee, S. See Vollmer, H.

Lee, W., sawdust-distilling apparatus, (P.), B., 1004.

Leech, P. N., fifty years' progress in standardisation and evaluation of medicinals, B., 850*.

Leeds & Northrup Co. See Harsch, J. W.

Leemans, P. J., recovery of zinc from ores, (P.), B., 370.

Leendertz, G., determination of labile serum globulins, A., 442.

Leeper, G. W. See Davies, W.

Leerer, W. D., and American Demulsifying Co., continuous process of demulsifying mineral oils, (P.), B., 353.

Leerburger, A. B. See Cohen, J. S.

Leers, L., preparation of dialkylethienylcarbinols, A., 596.

pinacones, A., 596, 711.

α -hydroxyketones, A., 599.

Leers, L. See also Locquin, R.

Leese, C. E. See Boyd, J. D.

Leete, C. S., relation between the bacterial count of whole milk and that of the cream and skim milk separated from it, B., 295.

Lefebvre, V., Hailwood, A. J., and British Dyestuffs Corporation, compound for accelerating the vulcanisation of caoutchouc, (P.), B., 205*.

Lefebvre, H. See Jolibès, P.

"Le Fer" Société Anonyme, electrolytic manufacture of iron, (P.), B., 18*.

Le Feuvre, R. J. W., and Turner, E. P., orientation effects in the diphenyl series. II. Constitution of Bandrowski's dinitrobenzidine, A., 946.

orientation effects in the diphenyl series. III. Mononitro-4 : 4'-dihalogenodiphenyl and allied compounds, A., 1029.

space formulae of diphenyl, A., 1131.

Legat, A. A. See Sargent, D. F.

Legatski, T. W. See Leslie, E. H.

Legeler, E., continuous separation of sulphur from sulphur solutions, (P.), B., 406, 789*.

Legende, L. R., equilibrium between carbon dioxide and carbonates in the air, water, and earth of the globe, A., 143.

Legentil, L. D., and Graffe, R., magnesia-zinc cement, (P.), B., 193.

Legelerz, H. See Rosenzweig, S.

Legg, D. A., Bogin, C., and Commercial Solvents Corporation, production of esters, (P.), B., 608.

Legg, D. A., and Commercial Solvents Corporation, production of butyl alcohol and acetone, (P.), B., 563.

Legg, D. A., Hancock, C. W., and Commercial Solvents Corporation, manufacture of butyric acid, (P.), B., 608.

catalysing apparatus, (P.), B., 857.

Legg, F. H., and Wheeler, R. V., composition of coal: plant cuticles in coal, B., 392.

Le Guyon, R. F., general analytical procedure: centrifugovolumetry, A., 927.

Lehfeldt, A. See Stobbe, H.

Lehigh Coal and Navigation Co. See Delzeit, J. P.

Lehmann, E., compensating the copying intensity of kinematograph films, (P.), B., 338.

Lehmstedt, K., production of dyestuffs [from glycosine], (P.), B., 7.

determination of tetryl in explosives, B., 388.

preparation of a nitro-derivative of glycosine (di-iminazoyl), (P.), B., 869.

Lehn & Fink, Inc., assay of potassium chloride, B., 87.

Lehn & Fink, Inc. See also Klarmann, E.

Lehnartz, E. See Emden, G.

Lehner, A. See Kohorn, O. von.

Lehner, F., and Kao, C. H., chemistry of gold, A., 238.

Lehr, F., influence of beryllium on formation of enzyme, A., 434.

Lehr, J. W., and U.S. Industrial Alcohol Co., nickel-copper alloy, (P.), B., 233.

Lehrer, E., dependence of the susceptibility of a diamagnetic gas on pressure, A., 784.

magnetic susceptibility of gases; dependence on temperature and pressure, A., 1086.

Lehrmann, L. See Taylor, T. C.

Leiboff, S. L., apparatus for the determination of cholesterol, A., 1184.

Leibowitz, J., maltase of barley malt, and the specificity of the disaccharases, A., 322.

Leibowitz, J., and Mechlinski, P., specificity of the disaccharases. II. Taka-maltase and taka-invertase, A., 365.

Leibowitz, J. See also Hudson, C. S., Kauffmann-Cosla, O., and Pringsheim, H.

Leicester, S., and Holman, L. B., manufacture of paper [pulping waste paper], (P.), B., 269*.

Leicester, S. See also Berlin, A. L.

Leifson, S. W., absorption spectra of some gases and vapours in the Schumann region, A., 991.

Leimbach, G., determination of perchlorate in Chile saltpetre, B., 404.

Leimdörfer, J., colloid reactions in the oil and fat industries, B., 758.

Leimbach, L. R. See Veitch, F. P.

Leissner, O., carbonising apparatus, (P.), B., 861.

Leitner, W. See Braun, J. von.

Leitch, I., and Henderson, J. M., determination of iodine in foodstuffs and body-fluids, A., 1284.

Leitch, J. W., & Co. Ltd., and Everest, A. E., sulphonation of aromatic amines, (P.), B., 974.

Leitier, L. See Van Slyke, D. D.

Leites, S., connexion between vegetative nervous system and potassium and calcium ions of serum, A., 316.

Leitmeier, H., action of radium rays on rock-salt, fluorspar, and quartz, A., 367.

Leitner, F., carbonisation of bituminous substances, (P.), B., 229.

primary crystallites in chrome-nickel steels, B., 545.

Lejeune, A., kapok and cotton: differentiation, B., 355.

Lejeune, G., oxidisability of organic substances, A., 482.

Lelesz, E. See Randoi, L.

Lelipe, O., and International Nickel Co., refining nickel and nickel-copper mattes, (P.), B., 1018.

Lely, D., *jun.* See De Graaff, A.

Lemale, P. C., separation of vapours by absorption, (P.), B., 32.

Leman, E. D. See Hess, V. F.

Lemberg, C. S. See Smorodinev, I. A.

Lemme, G. See Rojahn, G. A.

Leimer, F. See Reissert, A.

Leimmermann, O., determination of manurial requirements of soils by laboratory methods, B., 378.

importance of soil carbon dioxide for the nutrition of plants and the action of some humus or carbon dioxide manures, B., 378.

so-called hot fermentation of farmyard manure, B., 457.

Leimmermann, O., and Wiessmann, H., phosphorus acid requirements of German arable soils, B., 600.

Lemon, N. E. See Rogers, T. H.

Lemoigne, M., dehydration and polymerisation products of β -hydroxybutyric acid, A., 1178.

Lemoigne, M., and Doptier, P. L., losses of nitrogen caused by soil bacteria in pure cultures, A., 979.

Lemon, H. B., relations between certain comet-tail spectra and the first negative Debye group, A., 1079.

Lemon, H. B., and Blackburn, C. M., three-dimensional method of representing quantum transitions in band spectra, A., 109.

Lemon, H. B., and Bobrovnikoff, N. T., relative intensities of the D_1 , D_2 lines of sodium in comets and in low-pressure laboratory sources, A., 549.

Lenart, P., mixing granular substances and liquids, (P.), B., 304.

Lengersdorf, N., kiln and like structure, and heat treatment (P.), B., 192*.

Lengrand, Krall & Cie. See Krall, L.

Lenier, S., adsorption of water vapour on a plane fused quartz surface; isosteric heats of adsorption of water on silica and platinum, A., 593.

Lenier, V., and Kao, C. H., properties of selenium monochloride, A., 785.

Lenk, E., determination of water-soluble excreta of aquatic animals, A., 414.

Lennard-Jones, J. E., forces between atoms and ions, A., 11.

Lennard-Jones, J. E., and Cook, W. R., molecular fields of hydrogen, nitrogen, and neon, A., 883.

Lennard-Jones, J. E., and Dent, (Miss) B. M., forces between atoms and ions, II., A., 888.

Lennard-Jones, J. E., and Taylor, P. A., theoretical calculations of physical properties of certain crystals, A., 11.

Lennartz, A., and Henninger, W., microstructure of duralumin alloys, B., 751.

Lenstrup, E., phosphorus content of human milk and cow's milk, A., 1163.

Lentz, H. N., and Du Pont de Nemours & Co., E. I., production of concentrated nitric acid from waste acids, (P.), B., 707.

Lentz, W. R. See Oberfell, G. G.

Lenz, W., equilibrium between matter and radiation in Einstein's closed universe, A., 1191.

Lenzberg, K. See Ellinger, P.

Lenze, F., and Rettmaier, refrigeration of gas for the removal of naphthalene, water, and ammonia, B., 938.

Lenzi, D. See Sborgi, U.

Leonard, A. P., manufacture of sugar, (P.), B., 294.

calandria for evaporators of sugar mills, (P.), B., 686.

Leonard, C. S., pharmacology of bismuth salts. I. Determination of bismuth. II. Toxicity and urinary elimination of soluble bismuth salts. IV. Toxicity and urinary elimination of bismuth olate and bismuth metal, A., 975.

toxicity of arsanetri-N-piperidinium chloride, A., 1068.

Leonard, C. S., and O'Brien, J. L., pharmacology of bismuth salts. III. Toxicity and urinary elimination of potassium bismuth tartrate, A., 975.

Leonard, R. J. See Schwartz, G. M.

Leonard, V., use of hexylresorcinol and its homologues as internal antiseptics, B., 298.

Leonard, V. See also Feirer, W. A., and Meader, P. D.

Leonhardt, C., manufacturing cement, (P.), B., 159.

Leon-Werke Arndt & Löwengard, selenium toning bath for photographic developing and printing papers containing silver, (P.), B., 300, 421.

toning sulphide-toned silver images on development and printing-out papers, (P.), B., 421.

Leonartz, J. E., production of carbon monoxide; production of water-gas, (P.), B., 732.

ore reduction; metallurgical process, (P.), B., 756.

Leone, P., constitution and synthesis of daphnulin, A., 75.

Leonhardt, E. See Zschimmer, E.

Leonia, C. G., separating syrup from residual molasses, (P.), B., 72.

Leontiev, K., spectral distribution of the sensitivity of a photo-electric element, A., 224.

Leopold, G. See Foote, H.

Leopold, R. See Farbw. vorm. Meister, Lucius & Brüning.

Leopape, A. See Mourea, C.

Lebeschkin, W. W., mechanism of coagulation, A., 678.

chemical constitution of living matter, A., 751.

Le Petit, C. J. M. M., treatment of hides, (P.), B., 1022.

Le Petit, C. J. M. M., and Burns, J. S., treatment of hides, skins, etc., (P.), B., 558*.

Lepetit, R., synthetic indigo, B., 121.

manufacture of dry products [bates] from pancreas, (P.), B., 839.

Lépinette, M., isomeric bromobutlenes; ethylenic stereoisomerism of α -bromo- β -butylenes and β -bromo- α -butylenes, A., 817.

isomeric bromobutlenes. II., A., 935.

Lépinette, M. See also Errera, J.

Lépkovsky, S., Hart, E. B., Hastings, E. C., and Frazier, W. C., effect of fermentation with specific micro-organisms on vitamin-C content of orange and tomato juice, B., 105.

Lépkovsky, S. See also Hall, F. G., and Hart, E. B.

Le Play, P., increasing the durability of lacquers, threads, and other products from cellulose, (P.), B., 401.

Lepper, E. H., and Martin, C. J., discrepancy between electrometric and colorimetric determinations of ϵ_1 according to the salt-content of the solution, A., 442.

Lepper, E. H. See also Martin, C. J.

Lepper, H. A., and Waterman, H. C., determination of fat in cacao products, B., 26.

Lepper, W., preventing bumping in the determination of crude fibre [in feeding stuffs, etc.], B., 418.

Lepper, W. See also Mach, F.

Leberberge, A. van, effect of zinc white or similar metallic oxides, lithopone, and white lead for use in the preparation of palut, (P.), B., 680.

Lech, W., and Bogue, R. H., determination of uncombined lime in Portland cement, B., 709.

Lerner-Steinberg, B., heat of dilution of ammonium nitrate, A., 910.

Lerner-Steinberg, B. See also Wartenberg, H. von.

Leroy, F., manufacture of alkali metabisulphites or bisulphites, (P.), B., 822.

Lerino, A. F., volatility of salicylic acid, B., 298.

rapid sorting test for small quantities of tartaric acid in self-raising flour, B., 460.

volatility of benzoic acid, B., 802.

Lescour, L. See Degrez, A.

Les Etablissements Poulen Frères. See Etablissements Poulen Frères.

Leslie, E. H., and Genesse, J. C., distillation studies, B., 615.

Leslie, E. H., Genesse, J. C., Legatski, T. W., and Jagrowski, L. H., latent heats of vaporisation of distillates from paraffin-base petroleum, B., 180.

Leslie, E. H., and Potthoff, E. H., cracking of petroleum oils, B., 810.

Leslie, E. H., and Simon, S., antirachitic factor of cod-liver oil, A., 870.

Les Petits-Flis de F. Wendel & Cie, liquid air explosives, (P.), B., 966.

Lespiau, R., action of acraldehyde on the mixed dimagnesium derivative of acetylene, A., 500.

preparation of acetylenic alcohols from mixed dimagnesium derivatives of acetylene, A., 395.

Lesser, E. J., effect of homologous alcohols on sugar formation in the frog's liver, III., A., 756.

Lesser, E. J. See also Bissinger, E.

Lesser, R., and Gad, G., 3-hydroxy-a-naphthoic acid and attempts to prepare an unsymmetrical naphthoxtin, A., 167.

acetylation of aromatic hydroxycarboxylic acids, A., 402.

Lessheim, H., moment of momentum of the electrons of rotating molecules, A., 333.

Lessing, R., separation of iron and aluminium from zirconium, A., 263.

coal ash and clean coal, B., 224.

Lesure, A. See Loepfer, M.

Leszynski, A., production of adhesives [vegetable glue], (P.), B., 602.

Leube, E. See Visth, H.

Leuchs, chemical processes in the ripening of viscose, B., 435.

Leuchs, H., and Kowalski, G., ethyl 1-ketohydrindyl-2-glyoxylate, A., 66.

behaviour of certain hydroniums towards phenylhydrazine, A., 293.

Leuchs, H., and Schmieder, W., strychnos alkaloids. XLVI. Degradation of derivatives of brucinonic acid, A., 418.

Leuchs, O. See Farbenfabr. vorm. F. Bayer & Co.

Leuck, G. J. See Trickey, J. P., and Whitmore, F. C.

Leulier, A., and Dubreuil, R., Marquis' reagent and hydroxydilmorphine, A., 1050.

Leulier, A. See also Mouriquand.

Leupold, C. W., fluorescence of sulphite-cellulose, B., 600.

Leutheusser, E. See Gutbier, A.

Levadit, C., Nicolau, S., Schoen, R., Girard, A., and Manin, Y., mode of absorption and mechanism of action of bismuth in experimental syphilis, A., 975.

Levallois, F., tannins for use in wine making, B., 380.

Levaitz-Ezerski, M., osmotic pressure of solutions. IV., V., VI., and VII., A., 120, 571.

Leven, I. H., and Gas Industries Co., electrolytic cell, (P.), B., 19.

Levene, P. A., mucoproteins of snails, *Helix aspersa* and *H. pomatia*, A., 87.

nitrogenous components of yeast nucleic acid, A., 441.

Levene, P. A., and Bass, L. W., configurative relationships of dialkylacetio acids, A., 1226.

Levene, P. A., Bass, L. W., and Simms, H. S., ionisation of pyrimidines in relation to structure of pyrimidine nucleosides, A., 1260.

Levene, P. A., and Haller, H. L., conversion of optically active lactic acid into α -dihydroxypropane, A., 597.

configurational relationships of α , β , and γ -hydroxy-acids, A., 1024.

configurational relationships of α , β , and γ -hydroxy-acids. II. Conversion of δ - α -amino- γ -hydroxybutane into δ - α -dihydroxybutane, A., 1122.

Levene, P. A., and Hoeven, B. J. C. van der, vitamin-B, A., 98.

concentration of the growth-promoting principle obtained from yeast (vitamin-B), A., 760.

concentration of vitamin-B. III., A., 1279.

Levene, P. A., and Meyer, G. M., optical rotation of methylated gluconic acids, A., 49.

pentamethylglucose and its dimethylacetal, A., 1026.

ditripropylidene glucose. III. Methylated methylglucosides prepared from monoisopropylidene glucose, A., 1228.

Levene, P. A., and Mikeska, A., substitution by halogen of the hydroxy-group of secondary alcohols, A., 45.

oxidation of secondary mercaptans, A., 46.

oxidation of mercaptans and mercapto-acids to corresponding sulphonic acids, A., 1225.

Levene, P. A., and Pfaltz, M. H., racemisation. III. Action of alkali on glycyl- α -alanylglycine and glycylglycyl- α -alanylglycine, A., 852.

racemisation. IV. Action of alkali on diketopiperazines and peptides, A., 1250.

Levene, P. A., and Röhl, I. P., bromolecithins. II. Bromolecithins of liver and of egg-yolk, A., 635.

plant phosphatides. II. Leocithin, cephalin, and so-called curorin of soya bean, A., 932.

Levene, P. A., and Simms, H. S., lactone formation from gluconic acids and the structure of dextrose, A., 1025.

nucleic acid structure as determined by electrometric titration data, A., 1236.

Levene, P. A., Simms, H. S., and Bass, L. W., effect of ionisation on optical rotation of nucleic acid derivatives, A., 1265.

Levene, P. A., Simms, H. S., and Pfaltz, M. H., relation of chemical structure to rate of hydrolysis of peptides. III. Enzymic hydrolysis of di- and tri-peptides, A., 1265.

Levene, P. A., and Sobotka, H., thio-sugar from yeast, A., 52.

acetylated monosaccharides. I. and II., A., 601.

α - and β -forms of sugars and sugar derivatives, A., 822.

Levene, P. A., and Walt, A., configurational relationship between β -hydroxybutyric acid and propylene glycol, A., 937.

Levens, A. S., effect of calcium chloride on strength of concrete, B., 825.

Lever Bros., Ltd., Craig, R., and Shawfield, C. E. C., plant for removal of free fatty acids and other impurities from oils, fats, and the like, (P.), B., 20.

Levi, G. R., varieties of thorium oxide and their catalytic action in the dehydration of alcohol, A., 114.

application of X-ray analysis of crystalline powders to chemical problems, A., 227.

basic magnesium carbonates, B., 100.

Levi, G. R., and Fontana, C., palladium oxides, A., 1017.

Levi, G. R., and Haardt, R., catalytic action of metals of the platinum group and their degree of subdivision. I. and II., A., 365, 693.

Levi, G. R., and Haardt, R., crystal structure of ruthenium and osmium, A., 996.
 catalytic action considered as a surface action, A., 1012.

Levi, G. R. See also Zambonini, F.

Levin, (Miss) E. See Rowe, F. M.

Levina, L. See Rathery, F.

Levine, A. A., orientation in the benzene ring; bromination of pyrogallol 2 : 6-dimethyl ether, A., 516.
 orientation in the benzene ring; chlorination of pyrogallol 1 : 3-dimethyl ether, A., 1241.

Levine, A. A. See also Hunter, W. H.

Levine, S. Z. See Richardson, H. B.

Levine, V. E. See McDonald, J. P.

Levitski, (Prl.) M., Zeeman effect in the palladium spectrum, A., 875.

Levshin, V. L. See Vavilov, S. J.

Levy, F., bituminous emulsions, (P.), B., 748.

Levy, F. See also Asphalt Cold Mix, Ltd.

Levy, J., and Gingberg, L. D., process of dry-dyeing, (P.), B., 154.

Levy, (Mlle) J., semipinacol transformation; necessity for the presence of a phenyl group in molecular transpositions, II., A., 399.

Levy, (Mlle) J., and Lagrave, R., preparation of benzoyl hydroperoxide (perbenzoic acid), A., 286.

Levy, (Mlle) J. See also Tiffeneau, J.

Levy, L. A., manufacture of cellulose acetate, (P.), B., 10.
 apparatus for the manufacture of artificial filaments, (P.), B., 357*.
 production of artificial filaments, (P.), B., 627.

Levy, M. See also Tiffeneau, J.

Levy, L. A., manufacture of cellulose acetate, (P.), B., 10.
 apparatus for the manufacture of artificial filaments, (P.), B., 357*.
 nozzles for the production of artificial filaments, (P.), B., 740*.

Levy, M. See Prodor Fabr. de Prod. Organiques S.A.

Levy, P., and Raaff, H., American colophony, B., 638.

Lewers, W. W., and Lowy, A., comparative study of azo-dyes made with H-acid and acetyl-H-acid, B., 85.

Lewin, M. E. See Budnikov, P. P.

Lewin, T., separation and recovery of copper, tin, and lead content of brass or bronze secondary metals [scrap] and residues, (P.), B., 369.

Lewis, B., and Rideal, E. K., Buddie effect in bromine. I. Photoactive constituent in wet bromine. II. Kinetics of the reaction and the light absorption of wet and dry bromine, A., 484.
 influence of water on the combination of the halogens with hydrogen, A., 1111.

Lewis, C. P., and Minerals Separation North American Corporation, concentration of ores, (P.), B., 18, 441.

Lewis, C. P. See also Minerals Separation, Ltd.

Lewis, E. P. See Edmund, J. E.

Lewis, G. P., low-temperature tar oils, B., 624.

Lewis, G. T., and Lewis, H. B., metabolism of sulphur. XI. Can taurine replace cystine in the diet of the young rat ?, A., 1056.

Lewis, H. A., and Du Pont de Nemours & Co., E. I., explosive compound [trinitrophenoxethyl nitrate], (P.), B., 78.

Lewis, H. B., and Wilson, R. H., metabolism of sulphur. X. Determination of cystine in urine, A., 1068.

Lewis, H. B. See also Lewis, G. T., and McGinty, D. A.

Lewis, H. F., and National Aniline & Chemical Co., purification of anthraquinone, (P.), B., 578, 817.

Lewis, J., manufacture of poultry and animal foods from waste and condemned foods and other food refuse, (P.), B., 696.

Lewis, J. H., and Wells, H. G., immunological properties of alcohol-soluble vegetable proteins. IX. Biological reactions of vegetable proteins, A., 193.

Lewis, J. P. See Whitecomb, W. O.

Lewis, J. S., vapour pressure of [motor] fuel mixtures, II., B., 305.

Lewis, J. W., and Atlantic Refining Co., oil-treating apparatus, (P.), B., 814.

Lewis, J. W. See Andrade, F. N. Da C.

Lewis, N. B. See Sidwick, N. V.

Lewis, P. S., kinetics of protein denaturation; effect of variation in the hydrogen-ion concentration on the velocity of the heat denaturation of (I) oxyhaemoglobin, (II) egg albumin; critical increment of the process. (III) Influence of neutral salts on velocity of heat denaturation of oxyhaemoglobin, A., 1204.

Lewis, W. C. M. See Garner, M.

Lewis, W. L., and Bent, H. E., 3 : 4-diaminophenylarsinic acid and some of its derivatives, A., 628.

Lewis, W. L., Vose, R. S., and Lowry, C. D., jun., use of sodium nitrite in curing meats, B., 104.

Lewis, F., method for distinguishing α - and β -naphthols, B., 900.

Lewitsky, M., bending of rock-salt in air and water, A., 338.

Lewyeff, H. See Schaaerschmidt, A.

Ley, H., and Hünecke, H., absorption of light by simple carboxylic acids in the ultra-violet, A., 556.

Ley, H., and Volbert, F., absorption of light by simple amines in the ultra-violet, A., 1080.

Leyde, E. See Leyde, J.

Leyde, J., and Leyde, E., photographic gelatin emulsion surfaces, (P.), B., 300.

Leysiesser, G. See Balke, P.

Liahs, L., manufacture of agglomerated fuel, (P.), B., 907.

Lialikov, K., and Bela, M., equilibrium between the ions of iodine and of tervalent iron, A., 907.

Liang, B., and Wacker, L., fat, cholesterol, and sterol metabolism of growing rats in the presence and absence of vitamin-A, A., 267.

Lilley-Owens Sheet Glass Co., forming sheet glass, (P.), B., 363*.
 sheet glass drawing apparatus, (P.), B., 668*.

Lilley-Owens Sheet Glass Co. See also Ferngren, E. T., and Mambourg, L.

Libby, G. N., and National Magnesia Manufacturing Co., process of making alkali [sodium] carbonate, (P.), B., 12.

Libers, E. E., drying and congealation of egg albumins, (P.), B., 296.

Liberty Yeast Corporation. See Wroten, J. F.

Lichtenberger, T. See Salzwerk Heilbronn A.-G.

Lichtenegger, K., dielectric constant of natural and synthetic mixtures, A., 456.
 derivation of the logarithmic rule of mixtures by the Maxwell-Rayleigh method of limits, A., 1089.

Lichtenstadt, L. See Meisenheimer, J.

Lichtenstein, W. J. See Zawadzki, J.

Lichtenstein, R. See Allchemin Algem. Chem. Ind. A.-G.

Lichtenthaeler, F. E., apparatus for generating ether, (P.), B., 692.

Lidholm, J. H., producing a fertiliser of urea, (P.), B., 559*.

Lidholm, J. H. See also Wargöns Aktiebolaget.

Lide, W., separation of tin and antimony, especially from tin-antimony-lead alloys, by the dry method, B., 327.

Lie, E. See Tharaldsen, F.

Liebe, F. See Ruzicka, L.

Lieben, F., and Lászlo, D., influence of ions on the sugar assimilation of oxygenated yeast, A., 96.
 relation of creatine to protein and carbohydrate metabolism, A., 1272.

Lieben, F., and Popper, H., colour reactions of certain heterocyclic compounds with aldehydes, A., 959.

Liebers, H., and Hamburger & Co. Ges.m.b.H., preparation of cheese having an increased or supplemented vitamin content, (P.), B., 689*.

Liebers, H. See also Mellemeuropæisk Patent-Financierings-Selskab A./S.

Liebert, J. B. See Spencer Chapman & Messel, Ltd.

Liebknecht, O. See Deutsche Gold- & Silber-Scheideanstalt vorm. Roessler.

Liebmann, S. See Bodé, R. von.

Liebowitz, I. See Stein, H.

Liebreich, E., anomalies of electrocapillary curves, A., 178.
 origin of pitting corrosion phenomena [in iron water pipes], B., 57.
 electrolytic separation of metallic chromium; production of solutions containing oxides of chromium for the deposition of metallic chromium, (P.), B., 96.
 surface films in the cathodic polarisation of metals, B., 546.

Liebreich, E., and Wiederholt, W., electrochemical behaviour of chromium, A., 687.

Liechti, A., influence of X-rays on bioelectric potential differences, A., 804.

Lielacher, J. See Weissenberger, G.

Liempt, J. A. M. van, metal-pairs forming a continuous series of mixed crystals, A., 344.
 green colour of tungsten oxide, A., 812.
 limits of resistance of tungsten-molybdenum mixed crystals, A., 896.

Liempt, J. A. M. van. See also Geiss, W.

Lieneweg, F. See Bodenstein, M.

Lienhardt, W. S., and Metal & Thermit Corporation, process of recovering nickel, (P.), B., 792.

Liepatov, S., kinetics of the swelling and shrinking of gels, A., 124*.
 adsorption, I., A., 571.
 adsorption of electrolytes by cotton yarn; theory of mercerisation, A., 573.
 adsorption of alkali by cellulose, A., 573.
 kinetics of the swelling and de-swelling of gels, A., 577.
 adsorption. III. Adsorption velocity, A., 673.
 adsorption. IV. Sorption phenomena and chemical processes, A., 789.
 viscosity and hydration of dye solutions, A., 903.

Lieper, T. See Fromm, E.

Lier, H. See Karrer, P.

Liers, F., and Pokorny, K., cinematograph pictures in natural colours, (P.), B., 997.

Liesegang, R. E., silver chloride grain, B., 965.

Lieser, T., alkali-soluble cellulose, B., 579.

Lieser, T. See also Karrer, P.

Lifschitz, I., photochemical transformations in the triphenylmethane series, III., A., 61.

Lifschitz, I., and Rosenbohm, E., absorption spectrum of *p*-benzoquinone vapour, A., 884.

Lifschitz, I., determination of bile salts in blood, A., 763.
 bleaching of wool grease, B., 500.

Lifschitz, I., and Vietmeyer, O., isophytosterol in chewing-gum, A., 982.

Light, L., absorption spectra of quinones; relations of quinones to α -diketones, A., 992.

Lignite Pressed Coal Co. See Neumaier, J. E.

"Lignojen" Maschinen & Apparatebau Ges. See Moscovitch, B.

Liltiernik, A. See Hepner, B.

Lilienfeld, L., manufacture of cellulose compounds [thiourethane derivatives], (P.), B., 47, 100.
 producing viscous liquids [from tar oils], (P.), B., 479*.
 plastic mass [from cellulose ethers], (P.), B., 433*.
 manufacture of artificial materials [from *N*-substituted cellulose thiourethanes], (P.), B., 532.
 making cellulose derivatives [ethers], (P.), B., 661*.
 manufacture of new cellulose derivatives, (P.), B., 661*, 1009.
 improving artificial fibrous materials, (P.), B., 782.
 manufacture of artificial [coating, sizing, etc.] materials, (P.), B., 783.
 cellulose ether solvent and composition, (P.), B., 1010.

Lilienfeld, L. See also Jahoda, R.

Lilienroth, F. G., production of phosphoric acid and hydrogen, (P.), B., 320.
 producing concentrated phosphoric acid, (P.), B., 665.

Lilienroth, F. G., and Phosphorus-Hydrogen Co., producing hydrogen and phosphoric acid, (P.), B., 789*.

Liljestrand, S. H., and Wilson, D. W., excretion of lactic acid in urine after muscular exercise, A., 90*.

Lillie, R. S., activation of starfish eggs by acid, A., 755.

Lilly, J. K., and Lilly & Co., E., medicinal preparation, (P.), B., 172.

Lilly & Co., E. See Lilly, J. K.

Lim, R. K. S., and Ni, T. G., changes in the blood constituents accompanying gastric secretion; chloride, A., 315.

Limpächer, R. See Grün, A.

Linard, J., theory of concentrated solutions, A., 475.

Linck, G. See Gubler, A.

Linck, E. See Manchot, W.

Lind, S. C., origin of terrestrial helium and its association with other gases, A., 143.
 explosive reactions in gaseous media; ionisation and gaseous explosions, A., 690.

Lind, S. C., and Bardwell, D. C., chemical action of gaseous ions produced by α -particles. VI. Reactions of oxides of carbon, A., 1.
 new type of gaseous catalysis, A., 581.
 chemical effects in ionised gases, A., 651.
 chemical action of gaseous ions produced by α -particles. VIII. Catalytic influence of ions of inert gases, A., 770.
 ions of inert gases as catalysts, A., 990.
 chemical action of gaseous ions produced by α -particles. IX. Saturated hydrocarbons, A., 1077.

Lind, S. C., Bardwell, D. C., and Perry, J. H., chemical action of gaseous ions produced by α -particles. VII. Unsaturated carbon compounds, A., 769.

Lind, S. C. See also Porter, F.

Lindberg, S. See Odén, S.

Linde, J. O. See Johansson, C. H.

Linde Air Products Co. See Haynes, F. F.

Lindemann, A. F. [spinning electrons], A., 554.
 Lindemann, F. A., and Keeley, T. C., photo-electric radiation pyrometer, B., 79.
 Lindemann, H., and Heinemann, H., Einhorn's so-called egonidine dibromide, A., 417.
 Lindemann, H., and Mühlhaus, A., hydroxybenzylidene azides and indoxazens, A., 80.
 Lindemann, H., and Mühlhaus, F., derivatives of 1-aminocarbazole, A., 75.
 Lindemann, H., and Thiele, H., benzisoxazole [indoxazin], A., 1047.
 Lindemann, L. J. J., and Hodge, T. P., preserving yeast, (P.), B., 381.
 process for making fresh yeast lasting, (P.), B., 929.
 Lindemann, W. C. See Danielson, R. R.
 Lindenbaum, L. See Alpren, D.
 Linder, G. C. See Van Slyke, D. D.
 Lindström-Lang, K., measurements with the quinhydrone electrode, A., 247.
 Lindström-Lang, K., and Lund, (Miss) E., proteins. IX. Influence of salt concentration on the acid-binding capacity of egg-albumin, A., 1101.
 Lindström-Lang, K., physical examination of sugar juices, B., 72.
 Lindthead, P. T., and Smith & Co., F. L., ball grinding mill, (P.), B., 176, 728.
 Lindman, E. I., production of highly porous clay material, (P.), B., 1015.
 Lindmayer, E., needle form of the caoutchouc molecule as a practical structure theory, B., 714, 924.
 Lindner, F. See Fischer, Hans.
 Lindner, J., and Siegel, A., course of the 2-methylquinoline synthesis with amino-tetrahydronaphthalenes; 2-methyl-7:8:9:10-tetrahydro-a-naphthaquinoline, A., 410.
 Lindner, J., and Stauffer, M., course of the 2-methylquinoline synthesis with a-tetrahydro- β -naphthylamine, II., A., 410.
 Lindner, K. See Chem. Fabr. Milch A.-G.
 Lindsay, D. C., and Weddington, W. H., drying properties of clays, B., 127.
 Lindsay, G. A., and Van Dyke, G. D., X-ray absorption of calcium in calcite, gypsum, and fluorite, A., 1186.
 Lindsay, G. A. See also Chamberlain, K.
 Lindsay Light Co. See McCay, H. N.
 Lindsey, G. S. See Hansen, J. E.
 Lindsey, J. B., and Archibald, J. G., value of calcium phosphate as a supplement to the ration of dairy cows, A., 429.
 Lindstal, I. See Euler, H. von.
 Lindt, V., metallographic study of corrosion in the cellulose and paper industries, B., 871.
 Line, J., aluminum and acid soils, B., 891.
 Linear, S. O. See Wilson, J. A.
 Lines, G. O. See Wilson, J. A.
 Ling, S. M., determination of protein in cerebrospinal fluid; increase of protein in typhus fever, A., 1055.
 Linke-Hofmann-Lachhammer A.-G., and Wiegand, E., manufacture of steel or malleable iron, (P.), B., 329.
 Linker, O., transformation of crude peat into a coal-like substance, (P.), B., 572.
 Linnewer, W. See Poller, K.
 Linnemann, W. See Hofmann, K. A.
 Linsbauer, A., and Fiser, J., decolorisation of intermediate and thick juices by "Carboraffin" and "Norit," B., 559.
 Linstead, R. P., and Williams, L. T. D., three-carbon system. VIII. Tautomeric systems terminated by a phenyl group, A., 1245.
 Lint, H., [dyeing] naphthol AS colours on artificial silks, B., 484.
 Linton, E. O., and Linton Gasoline Process Co., apparatus for cracking oil, (P.), B., 863.
 Linton Gasoline Process Co. See Linton, E. O.
 Liot, A. E. A. P., and Macé, L. A., pectin preparation, (P.), B., 818.
 Liotta, P., oil from leaves and twigs of the lemon-tree (petitgrain), B., 340.
Mentha pulegium [pennyroyal] oil, B., 691.
 Liquid, F., alcohol fuel, (P.), B., 183.
 Lipmaa, T., physical and chemical properties of rhodoxanthin, A., 534.
 Lipman, C. B., Davis, A. R., and West, E. S., tolerance of plants for sodium chloride, B., 1023.
 Lipman, C. B. See also Gordon, A.
 Lipp, P. [with Lüddecke, W., Kalinov, N., and Petkov, A. P.], nitro- and *gem*-dinitro-ethylenes, A., 1029.
 Lippmann, E. O. von, [syntheses by means of organic peroxides], A., 165.
 occurrence of crystallised levulose, A., 386.
 anticipation of modern physico-chemical views, A., 493.
 Lipschitz, W. See Rosenthal, B.
 Liquier, (Mme) J., rotatory power of solutions of quinine salts as a function of their hydrogen-ion concentration; rotatory power of asparagine and the effect of added salts, A., 906.
 Lissizin, M. A. See Putochin, N.
 Little, E. M., ionisation by ultra-critical frequencies [of monochromatic ultra-violet light], A., 1075.
 Little, N. C., thermomagnetic and galvanomagnetic effects in arsenic, A., 998.
 Little, W. T., and Metal & Thermit Corporation, process for producing stannous chloride, (P.), B., 915.
 Little Co. Inc., A. D. See Stevenson, E. P.
 Littleton, J. T., jun., and Shaver, W. W., temperature of pyrex and porcelain in sunlight, B., 916.
 Littmann, E. R., and Commercial Solvents Corporation, paint and varnish remover, (P.), B., 203.
 nitrocellulose composition, (P.), B., 704.
 Litynski, T. See Dziewolski, K.
 Litz, E. E. See Jones, J. D.
 Litzner, S. See Bachar, E.
 Livingston, J. W., and Kryides, L. P., manufacture of monochloro-nitrobenzene, (P.), B., 658.
 Livingston, R. S., activity of hydrobromic acid in pure aqueous solution and in solutions containing sulphates, A., 245.
 catalytic decomposition of hydrogen peroxide in a bromine-bromide solution. III. Interpretation of rate measurements as a function of the activity product of hydrobromic acid, A., 251.
 Livingston, R. S., and Bray, W. C., catalytic decomposition of hydrogen peroxide in an acid-chlorine-chloride solution, A., 361.
 Livingston, A. F. See Cranston, J. A.
 Livingston, C. J., Marley, S. P., and Gruse, W. A., motor carbon deposits formed under controlled conditions from automobile oils, B., 571.
 Ljubimenco, W., plastid pigments. I. Absorption spectra of plastid pigments in living tissue, A., 439.
 Ljunggren, G. See Stobbe, H.
 Llewellyn, W. B. See Spence, H.
 Lloyd, D. J., Pickard, R. H., and British Leather Manufacturers' Research Assoc., soaking liquor for dried hides and the like, (P.), B., 558*.
 Lloyd, D. See also Pickard, R. H.
 Lloyd, F. E., sodium cobaltinitrite reaction for potassium in plant cells, A., 1280.
 Lloyd, H. D., Hill, C. E., and Whitecross Co., Ltd., electrode for welding and like purposes, (P.), B., 984.
 Lloyd, J. H., Walter, C. M., and Palser, J., muffle for the heat treatment of metals, (P.), B., 97*.
 Lloyd, L. L., Womersley, A., Wilkinson, C., and Scott, A., [compositions for] scouring of textile fibres, (P.), B., 663.
 Lobanov, M., quadrivalent uranium compounds, A., 372.
 Lobel, L., and Bune, L. J., developer containing diaminophenol and *p*-phenylenediamine in bisulphite solution, B., 805.
 Loberg, K., clinical determination of salicylic acid in serum and cerebrospinal fluid, A., 648.
 Lobley, A. G., and Jepson, D., influence of gases on copper at high temperatures, I., B., 270, 701*.
 Lobmayer, G. See Koenigs, E.
 Lobisotzky, A.-G. zur Erzeugung Vegetabilischer Oele, and Dubsky, G., manufacturing linoleum, (P.), B., 202.
 Loche, H. L., micro-method for determining carbon in organic compounds, A., 749.
 Loche, H. L. See also Schulze, W. A.
 Lock, L. See Farbenfabr. vorm. F. Bayer & Co.
 Locke, F. J. See Locke, F. M.
 Locke, F. M., and Locke, F. J., batch for making ceramic material, (P.), B., 363.
 Lockemann, G., detection and determination of small quantities of arsenic in gases, A., 1221.
 manufacture of 1-phenyl-2:3-dimethyl-4-dimethylamino-5-pyrazolone, (P.), B., 466*.
 Lockrow, L. L., critical potentials and spectra of oxygen, A., 1188.
 Loquin, R., and Leers, Z., dehydration of pinacones, I., A., 593, 711.
 Lodati, D., influence of sunlight on trinitrotoluene, B., 220.
 Lode, W., influence of the mean principal stress on the flow of iron, copper, and nickel, A., 866.
 Lodge, (Sir) O. J., law of radiation, A., 774.
 Lodočnikov, W. N., plane representation of multicomponent systems, A., 358.
 Loeb, Leo, and Bodansky, O., occurrence of urease in blood-cells, blood plasma, and tissues of *Limulus*, A., 434.
 Loeb, Leonard, and Condon, E., theory of the range of α -particles, A., 5.
 Loeb, L. B., mobility of gaseous ions in gaseous hydrogen chloride and hydrogen chloride-air mixtures, A., 219.
 mobility of gas ions in hydrogen chloride mixtures and the nature of the ion, A., 219.
 limitations of the theoretical equations for the mobilities of gaseous ions, A., 449.
 Loeb, L. F. See Wreschner, M.
 Loeb, R. F., effect of pure protein solutions and of blood-serum on the diffusibility of calcium, A., 856.
 Loeb, S. See Bonhoeffer, K. F.
 Loebel, R. O., respiration and glycolysis in animal tissues, A., 84.
 Loebich, O., determination of perchloric acid, A., 489.
 Loebich, O. See also Weinland, R.
 Löchner, L. See Chem. Fabr. Griesheim-Elektron.
 Löffler, E., and Rigler, R., inhibition of bacterial growth by cyanide, A., 869.
 Lögstrup, M. See Hevesy, G. von.
 Löhnis, F., availability of nitrogen in green manures, B., 990.
 Löhwing, F., effects of lime and potash fertilisers on certain muck soils, B., 717.
 Loepfer, M., Decourt, J., and Lesure, A., formation of amino-acids in discharges, A., 1169.
 Loepfer, M., Decourt, J., and Tonnet, J., formation of sulphur in discharges, A., 1169.
 Loepfer, M., and Mougeot, A., do spring-waters containing carbon dioxide and hydrogen carbonates activate amylases? A., 201.
 Loepfer, M., Mougeot, A., and Aubriot, V., effect of natural carbonate and sulphate waters on urease, A., 1176.
 Loepfer, M., Ollivier, J., and Lesure, A., amino-acid content of blood in melanodermatitis, A., 1053.
 Loesche, E. C., pulverising mills, (P.), B., 695.
 Loescher, H., manufacture of cement, (P.), B., 409.
 Löschner, L., [influence of after-treatments on the] fastness to light of dyeings obtained from naphthol AS compounds, B., 662.
 Lötz, A. See Dunne, E.
 Lövenhart, A. S. and Thomas, W. K. S., chemotherapy of neurosyphilis and trypanosomiasis, A., 1274.
 Löw, A., determination of neutral fat in blood by Bang's method, A., 1483.
 Löw, O., proteins, A., 439.
 labile modification of reserve-protein in plant cells, A., 871.
 Löwe, H. See Bergmann, M.
 Löwen, H. zur, condition of the "resin" in rubber, B., 597.
 Löwen, W. zur. See Elsässer, E.
 Löwenbein, A., and Gagarin, R. F., radical dissociation of arylated succinic acid derivatives, II. Radical dissociation of tetra-arylsuccinodinitriles, A., 168.
 Löwenbein, A., and Rosenbaum, B., 2:3:4-trisubstituted chromenyl radicals, A., 955.
 Löwenbein, A., and Ulich, G., synthesis of substituted indones and cyclopentadienones, A., 171.
 Löwenstein, A., and Katz, W., substituted spirobenzopyrans, A., 956.
 Löwenstein, E., electric high-temperature furnaces to 3300°, A., 706.
 Löwy, E. Bezzsonoff's reagent for vitamin-C, A., 871.
 Löwy, S. See Pnashin, N. A.
 Lohaus, G., proof of a polarisation phenomenon on conduction of electricity through electrically double-refracting nitrobenzene, A., 565.
 Lohmann, K. See Handovsky, H., and Meyerhof, O.
 Lohnes, H. R. See Sherman, O. H.
 Loiseleur, J. See Hugueneng, L., and Sédallian, P.
 Loke, W. A., electric furnaces, (P.), B., 447*.
 Lomanitz, S., alternate extraction and exposure method for the study of arsenicals, B., 306.
 physiological balance for alfalfa [lucerne] in solution cultures, B., 893.

Lomax, E. L., and Pemberton, E. S., determination of unsaturated hydrocarbons, A., 305.

Lomax, E. L. See also V. L. Oil Processes, Ltd.

Lomax, F. B., filter, (P.), B., 112, 856.

Lombard, T. See Durand & Huguenin S.A.

Lombard, V., permeability of nickel to hydrogen; influence of pressure, A., 319.

Lombardo, G. M., decomposition of reducible substances [phosphates], (P.), B., 360.

Lombolt, S., electrolytic method of investigation of distribution of gold compounds in the organism, A., 328.

Lomax, W. See Farbenfabr. vorm. F. Bayer & Co.

Lommen, F. W., and Carbide and Carbon Chemicals Corporation, process of making crotonaldehyde, (P.), B., 770.

London, F., number of dispersion electrons in [Schrödinger's] wave mechanics, A., 1191.

London, W. J. A. See Bell, J. E.

Long, C. L., Macnaughton, D. J., and Gardam, G. E., electrodeposition of chromium, (P.), B., 935.

Long, C. N. H., muscular exercise, lactic acid, and supply and utilisation of oxygen. XIV. Relation in man between oxygen intake during exercise and lactic acid content of the muscles, A., 190.

Long, C. N. H. See also Hetzel, K. S., Hines, H. J. G., Katz, L. N., and Wilson, D. W.

Long, E. R., chemical composition of the active principle of tuberculin. VI. Acid hydrolysis of tuberculin, A., 1178.

Long, E. R., and Seibert, F. B., tuberculin; chemical composition of the active principle and the nature of the tuberculin reaction, A., 325.

chemical composition of the active principle of tuberculin. I. Non-protein medium suitable for the production of tuberculin. II. Precipitation with acetic and other acids. III. IV. Ammonium sulphate precipitation of the proteins of tuberculin. VII. Evidence that the active principle is a protein, A., 1178.

Long, L., jun. See Whitman, W. G.

Long, M. L. See Blatherwick, N. R.

Long, M. P., and Lacten Co., non-souring milk food, (P.), B., 896.

Long, W. R., adhesive, (P.), B., 209.

Longchambon, H., triboluminescence and crystal luminescence, A., 660.

Longchambon, L., tartaric acids, A., 385.

rotatory dispersion of camphor, A., 550.

Longchambon, L., and Travers, A., manufacture of refractory material, (P.), B., 408.

Longhi, C., cracking liquid or readily fusible organic complexes [tars and heavy oils] by means of an electric arc, (P.), B., 525.

Longgrave, M. See Gastaldi, C.

Longinescu, G., and Chaborski, (Mu.) G., separation of the metals of group III, A., 502.

Longinescu, G. G., and Petrescu, E., detection of iron, manganese, and chromium without the use of nitric acid, A., 263.

Longinescu, J. N. See Auger, V.

Longuet, A. See Delépine, J.

Looker, C. D. See Evans, W. L.

Loomis, A. G., and Walters, J. E., establishment of the temperature scale to -103° by means of platinum-resistance thermometers, A., 141.

vapour pressure of ethane near the normal b.p., A., 999.

Loonim, C. C., Stump, H. E., and Hevesi Corporation, compounding rubber, (P.), B., 22.

manufacture of rubber, (P.), B., 1021.

Looney, J. M., colorimetric determination of tyrosine, tryptophan, and cystine in proteins. II, A., 1080.

blood changes in acute mercuric chloride poisoning, A., 1274.

Looney, J. M., and Kober, P. A., dialysing and evaporating membranes [from nitrocellulose], (P.), B., 392.

Looser, J. See Rhenania Ver. Chem. Fabriken.

Loosli, A. See Zetzsche, F.

Lopez, D., manufacturing arsenates, (P.), B., 439.

Lotter, L., general principle for the determination of different substances in body-fluids, A., 211.

simple micro-determination of diastase in body-fluids, A., 212.

nenophotometric determination of various substances; determination of sulphate in urine, A., 212.

Lotterblatt, I., and Falk, K. G., enzyme action. XXXVI. Ester-hydrolysing actions of the castor bean, A., 866.

Lotterblatt, I. See also Noyes, H. M.

Lord, E. C. E., waterproofing Portland cement concrete, (P.), B., 1015.

Lorenz, C. A.-G., high-frequency electric furnace, (P.), B., 985.

Lorenz, E. J., so-called positive photo-electric emission (inverse effect), and the reality of the sub-electron, A., 330.

Lorenz, J., manufacturing wax-colour binding means, (P.), B., 22.

Lorenz, R., new mass action law. I. Treatment of the new formula, A., 126.

quantitative adsorption analysis by Wilslecinus' method, A., 347.

determination of the potential of fluorine from decomposition voltages of molten fluorides, A., 473.

resin sizing of paper, B., 47.

equilibrium between metals and salts in the molten state; a new form of law of mass action, B., 244.

Lorenz, R., Fraenkel, W., and Ganz, M., equilibria between metals and salts in the molten state. V. Equilibrium between tin and lead and tin chloride and lead chloride, A., 799.

Lorenz, R., and Laar, J. J. van, extension of the new fundamental equation for the law of mass action to the case of an addition to the components of one phase, A., 355.

Lorenz, R., and Mannheimer, M., new mass action law. II. Discussion of the equations, A., 356.

new mass action law. III. Theoretical calculation of isotherms, A., 680.

Lorenz, R., and Westenberger, J., theory of electrolytic ions. XXXI. Transference numbers and ionic conductivities in lithium and potassium chlorides, A., 360.

theory of electrolytic ions. XXXII. Determination of limiting values of the conductivity of ions of potassium, lithium, and sodium chlorides, sodium bromide, and potassium iodide, A., 910.

theory of electrolytic ions. XXXIII. Transport numbers of anions of chlorides of sodium, potassium, and lithium and of potassium bromide and iodide, A., 1008.

Lorenz, R. See also Laar, J. J. van.

Loria, S., metastable $2p$ state of mercury atoms, A., 3.

indirectly excited fluorescence spectra, A., 10.

dependence of sensitised fluorescence on the added gas, A., 1081.

Loring, F. H., eka-casium, II., A., 12.

foreshadowing elements of atomic numbers 75, 85, 87, and 93 by means of X-rays, A., 227.

dvi-manganese and eka-casium, A., 338.

problem of X-ray line intensities, A., 551.

eka-casium and a suggestion about radiation and the elements, A., 561.

synthesis of elements in the X-ray tube, A., 656.

new elements. I—V., A., 780.

Loring, F. H., and Bruce, J. G. F., eka-casium and eka-iodine, A., 12.

search for element 93. II. Examination of crude dvi-manganese (rhenium). III. Foreshadowing elements 75, 85, 87, and 93, A., 12.

Loring, K. See Willstätter, R.

Lormand, C. See François, M.

Losana, L., allotropy of mercuric iodide, A., 908.

Losana, L. See also Montemartini, C.

Lothareff, B. See Frossard, J.

Lottermoser, A., and Bausch, S., preparation of colloidal silver by electrolysis, A., 351.

Lottermoser, A., and Herrmann, L., absorption of iodine by various substances, A., 898.

Loouck, M. M., rôle of calcium in the coagulation of the blood, A., 536.

Loouck, M. M. See also McClelland, J. F.

Louisville Drying Machinery Co. See Crédit, J.

Loukinsky, V., and Robikoff, W., conversion of hydrocarbons [into products of lower boiling point], (P.), B., 814.

Louth, M. E. See Udyrite Process Co.

Lovatt, A. E., Mitchell, F. M., and Mitchell, E. A., restoring plaster of Paris to its original state after use, (P.), B., 1015.

Lovatt, A. E. See also Lovatt & Lovatt, Ltd.

Lovatt & Lovatt, Ltd., and Lovatt, A. E., decorating or finishing earthenware or [other] pottery, (P.), B., 129.

Love, E. F. S. See Cook, G. A.

Loveless, A. W. T., improved laboratory fractionating column, A., 931.

Lovell, W. G., and Boyd, T. A., chemical equilibrium in gases exhausted by gasoline engines, B., 83.

Lovett, T. See Perman, E. P.

Lowe, H., splash-head for Kjeldahl apparatus, A., 38.

Lowe, H. M., determination of the acidity of commercial ammonium sulphate, B., 358, 629.

Lowe, P., effect of pressure on excitation of the hydrogen spectrum by electron impact, A., 769, 1074.

Lowery, H., refraction and dispersion of gaseous carbon disulphide, A., 1082.

Lowndes, E. C., reverberatory [puddling] furnaces, (P.), B., 283.

Lowry, C. D., jun. See Lewis, W. L., and Willstätter, R.

Lowry, M. V., and West End Chemical Co., producing borax and sodium bicarbonate from lake brines, (P.), B., 320.

Lowry, O., and Technical Products Corporation, prophylactic [mercuriated salvarsan], (P.), B., 108.

Lowry, T. M., asymmetric nitrogen atoms in natural products, A., 338.

experimental proof of the existence of semi-polar double linkings, A., 457.

rotatory dispersion, A., 662, 836.

Lowry, T. M., and Faulkner, J. J., dynamic isomerism. XX. Amphoteric solvents as catalysts for the mutarotation of the sugars, A., 148.

Lowry, T. M., and Owen, G., valency. V. Absorption spectra of halogen and sulphonio derivatives of camphor; origin of the ketone absorption band, A., 454.

Lowry, T. M., and Sasse, (Miss) R. R., valency. VI. General and selective absorption of halogen derivatives of methane; origin of general absorption, A., 454.

Lowry, T. M., and Singh, B. K., rotatory dispersion of nicotine, A., 110.

Lowry, T. M. See also Faulkner, J. J., and Jones, G. G.

Lowy, A. See Conn, J. F., Crocco, C. W., Nevay, J., and Parrett, A. N.

Lowy, B., process of and composition for dough-making, (P.), B., 74.

Lowy, H. See Lewars, W. W.

Lozarte, R. G., excitation potentials of mercury atoms, A., 1073.

Lozai, A., removing water from oils or other liquids, (P.), B., 525.

Lu, K. C., deformation study of various aluminosilicates and borosilicates, B., 240.

Lubimenko, V., physiological rôle of starch deposits in green parenchyma of leaves, A., 647.

Lubowsky, S. J., and Metal and Thermite Corporation, refractory material, (P.), B., 129.

Lucas, A., problems in connexion with ancient Egyptian materials, B., 903.

Lucas, F. F., recent developments in metallurgical research; new facts developed by high-power metallography, B., 280.

Lucas, H. J., electron displacement in carbon compounds. IV. Derivatives of benzene, A., 943.

Lucas, N. S., nature of the action on a photographic plate of sawdust and cholesterol irradiated by a mercury-vapour quartz lamp, A., 586.

Lucas, O. D., and Vickers, Ltd., retort furnace, (P.), B., 6°.

Lucas, O. D. See also V. L. Oil Processes, Ltd.

Lucas, R., rotatory power of camphor, A., 337, 862.

rotatory power of tartaric acid, A., 886.

Lucasse, W. W., activity coefficients of hydrochloric acid in glycerol-water mixtures, A., 474.

transference numbers of hydrochloric acid in glycerol-water mixtures, A., 687.

activity coefficients of hydrogen chloride in non-aqueous solutions, A., 796.

Lucasse, W. W., and Harris, J. M., jun., transition points of salt hydrates in non-aqueous solvents, A., 799.

Lucius, F., honey [analysis], B., 841.

Luck, K. See Kalle & Co., A.-G.

Lucklesh, M., a half-century of artificial [electric] lighting, B., 834*.

Ludlam, E. B., electron affinity of the halogens, A., 561*.

Ludlam, E. B., and Eason, L. H., active nitrogen, A., 1081.

Ludlam Steel Co. See Armstrong, P. A. E.

Ludtke, M., action of phenylcarbamide on diketopiperazines, A., 306.

Ludwig, G. E., catalytic effect of lead and manganese on the drying of China wood [tung] oil, B., 67.

Ludwig, H. See Mumum, O.

Ludwig, O., growth of yeast in wort, A., 431.
 Ludwig, O., See also Rippel, A.
 Ludwig, P., elastic limit and the cold and hot shortness [of steel], B., 544.
 Lücker, H., See Meyer, J. F.
 Lüddecke, W., See Lipp, P.
 Lüdke, B., See International General Electric Co.
 Lüter, H., apparatus for the electrometric determination of hydrogen-ion concentration, A., 813.
 Lüters, H., and Nishimura, S., influence of temperature on the optimal hydrogen-ion concentration for amylolytic action, B., 962.
 Lüters, H., and Weinfurter, F., determination of the activity of commercial disinfectants, B., 470.
 Lueg, P., infra-red absorption spectrum of didymium in glass and in solutions, A., 1193.
 Lüthig, H., fatal case of poisoning with sodium fluorosilicate and the detection of small quantities of sodium fluorosilicate, A., 928.
 detection of traces of fluorine in organic material, A., 1068.
 detection of small quantities of arsenic in cocoa, B., 140.
 loss of alcohol in spirits, B., 295.
 examination of cacao, B., 338.
 detection of preservatives containing fluorine in foods, B., 847.
 Lüthing, O., and Bartels, W., toxicity of white beans, B., 606.
 Lippo-Cramer, development paradoxes, B., 387.
 topographical relations in development, B., 387.
 nitro-compounds as desensitizers, B., 646.
 desensitization, B., 966.
 Lüthmann, P., See Hiltig, G. F.
 Lütschen, E., heat interchangers, (P.), B., 729.
 Lütringhaus, A., See Badische Anilin- & Soda-Fabrik.
 Luft, F., See Drucker, C.
 Lugeon, M., preparation of a solvent which increases the drying capacity of drying oils, varnishes, etc., (P.), B., 248.
 Lukacs, J., trypsin studies with normal and diseased infants, A., 636.
 Lukas, J., determination of coconut oil in chocolate fondants, B., 140.
 Lukas, J., and Jilek, A., electrolytic deposition of antimony from acid and alkaline solutions, A., 583.
 rapid electrolytic determination of tellurium by the use of a reduced potential, A., 1018.
 Lukas, J., See also Hanus, J., and Jilek, A.
 Lukasuk, A., See Chlopin, W.
 Lukens, H. S., and Sodifier Corporation, composition of matter [artificial stone], (P.), B., 56.
 Lukens, H. S., See also Smith, N. H., and Sullivan, R. E.
 Lukianov, P. M., oxidation of chrome iron ore in briquettes [for preparation of chromatics], B., 87.
 Lukirsky, P., Gudris, N., and Kulikowa, L., photo-electric effect in crystals, A., 777.
 Lumière, A., and Couturier, H., toxicity of serum left in contact with starch, A., 193.
 Lumière, A., Lumière, L., and Seyewetz, A., intensification by dye-toning, B., 421.
 photographic sensitizers of gelatin, B., 466.
 mordanting of silver images by cupric thiocyanate, B., 933.
 Lumière, A., and Perrin, F., phenylidialkylacetamides as hypnotics, A., 1273.
 Lumière, H., production of artificial silk from cellulose xanthate, (P.), B., 580.
 Lumière, L., See Lumière, A.
 Lumms, C. W., Isley, G. H., and Morgan Construction Co., gas producer, (P.), B., 264.
 Lungen-Beddinghoff, A., determination of permanent hardness of water by Pfeifer and Wartha's method, B., 222.
 Lund, (Mits) E., See Linderström-Lang, K.
 Lund, G. S., and Wolf, C. G. L., dextrose in blood, A., 635.
 Lund, H., triphenylmethane group, A., 723.
 Lunde, G., quantitative organic microanalysis, A., 1163.
 determination of minute quantities of iodine, A., 1220.
 Lunde, G., See also Barth, T., and Fellenberg, T. von.
 Lundeli, G. E. F., and Knowles, H. B., determination of uranium, A., 40*.
 rapid detection of small amounts of aluminium in certain non-ferrous materials [alloys], B., 195.
 Lundström, H., applications of [electrical] ash analysis in [sugar] factory control, B., 927.
 Lundgren, A., testing of hardened steel, B., 827.
 Lundsgaard, C., and Holboll, A. S., action of liver-tissue and insulin on dextrose, A., 644.
 transformation of glycogen, A., 644.
 distribution of non-electrolytes between corpuscles and plasma of human blood, A., 856.
 carbohydrate metabolism. VI. Determination of presence of "new glucose" in biological fluids. VII. Transformation of liver glycogen into dextrose in vitro. VIII. Action of liver tissue and insulin on dextrose in vitro, A., 861.
 standardisation of collodion membranes. I., A., 932.
 carbohydrate metabolism. XIV. Presence of "neo-glucose" in the course of fermentation of $\alpha\beta$ -glucose, A., 1061.
 carbohydrate metabolism. XIII. Presence of an insulin complement in the muscles of warm- and cold-blooded animals, A., 1064.
 carbohydrate metabolism. IX. Influence of insulin and muscle-tissue on dextrose in vitro, A., 1171.
 Lundsgaard, C., Holboll, S. A., and Gottschalk, A., carbohydrate metabolism. X. Occurrence of insulin complement in muscles of warm- and cold-blooded animals. XI. Occurrence of "new glucose" in fermentation of $\alpha\beta$ -glucose. XII. Properties of insulin complement, A., 1171.
 Lunge, E., and Courtaulds, Ltd., air-vessels for securing regular flow from reciprocating pumps [in manufacture of viscose silk], (P.), B., 316*.
 apparatus for manufacture of artificial silk, (P.), B., 316.
 pumps [for use in manufacture of viscose silk], (P.), B., 316*.
 filters [for viscose], (P.), B., 400.
 manufacture of artificial silk, (P.), B., 400.
 Lunn, E. G., See Hogness, T. R.
 Lunnan, R. G., atomic dimensions, A., 333.
 Lunt, H. A., See Engels, D. T.
 Lunt, R. W., method for producing a discharge in hydrogen, A., 985.
 Lurgi Apparatebau-Ges.m.b.H., determining the bacterial content of the air, (P.), B., 222.

Lurgi Apparatebau-Ges.m.b.H., [electrostatically] separating suspended particles from flowing gases or vapours, (P.), B., 224.
 preparation of sulphite liquor, (P.), B., 580.
 Lurz, L., See Thannhauser, S. J.
 Luscher, E., atomising and mixing liquids and gases, (P.), B., 807.
 Luscher, H. W., and United States Glus Co., drying gelatin, (P.), B., 415.
 Lush, E. J., and Technical Research Works, Ltd., production of metallic catalysts, (P.), B., 650*.
 Lusk, G., See Plummer, N. H.
 Lustig, B., dialysis during tryptic digestion of proteins, A., 543.
 Lustig, B., See also Freud, E.
 Lustig, O., and Katscher, E., preparation of di- and poly-sulphochlorides of homo- and hetero-cyclic mono- and poly-nuclear aromatic compounds and their substitution products, (P.), B., 964.
 Lutgemeyer, F., quantum theory of tri- and poly-atomic molecules, A., 991.
 Lutz, L., soluble enzymes secreted by the *Hymenomycetes* fungi; oxidations, A., 869.
 Lux, H., kinds of chemical linkage, A., 887.
 electronic structure of the elements based on their chemical properties, A., 905.
 Lvov, A., carotin-like compound as eye pigment of copepod; origin and development during ontogeny, A., 1052.
 Lvov, A., and Roukhman, N., variations of some forms of nitrogen in a pure culture of infusoria, A., 979.
 Lvov, A., See also Colas-Belcourt, J.
 Lyford, C. A., and Nat. Aniline & Chemical Co., method of sublimation [of benzanthrone], (P.), B., 817.
 Lykken, H. G., See Wilson, W. E.
 Lyman, T., spectroscopy of the extreme ultra-violet, A., 556.
 reversal of the hydrogen series in the extreme ultra-violet, A., 873.
 Lyman, T., and Saunders, F. A., spectrum of neon in the extreme ultra-violet, A., 446.
 Lynch, T. D., Mochel, N. L., and McVetty, P. G., tensile properties of metals [steel] at high temperatures, B., 514.
 Lynger, E. S., apparatus for transmission of heat from one medium to another, (P.), B., 34.
 Lynn, G., See Andrews, D. H.
 Lyons, R. E., and Smith, L. T., production of pure absolute alcohol, B., 384.
 Lyons, R. E., See also Bradt, W. E.
 Lyth, J. J., apparatus for drying fabrics, paper, etc., (P.), B., 534*.
 Lytle, J. D., and Hearn, J. E., Folin-Wu and new Benedict methods for determination of sugar, A., 984.

M.

Maag, E., utilisation of the effluent from fuller's earth and similar factories, (P.), B., 806.
 Maan, C. J., modification of the Wagner reaction with liquid air cooling, A., 594.
 Maass, O., and Barnes, W. H., thermal constants of solid and liquid carbon dioxide, A., 608.
 Maass, O., and Mennie, J. H., ideal gas laws in systems of one and two components, A., 233.
 Maass, O., and Silvertz, C., molecular attraction and velocity of reactions, A., 131.
 Mabee, C. R., and Mabee Patents Corporation, treating vegetable substances; continuous steam milling of vegetable substances, (P.), B., 214.
 Mabee, H. C., and Smaill, A. E., combined pyro- and hydro-metallurgical process for the treatment of nickeliferous pyrrhotite ores with the subsequent recovery of iron, sulphur, nickel, and copper, B., 671.
 Mabee Patents Corporation, See Mabee, C. R.
 Mabee, C. F., composition of Mid-continent petroleum, B., 810.
 "saturation" of the petroleum lubricant hydrocarbons as shown by their reaction with bromine, B., 970.
 Mabey, H. M., See Wells, H. P.
 MacAdam, D. J., *jun.*, endurance properties of non-ferrous metals, B., 16.
 McAfee, A., *McD.*, and Gulf Refining Co., recovery of aluminium chloride [from oil residues], (P.), B., 231.
 distilling oils with volatile catalysts, (P.), B., 431.
 distilling [petroleum oil] with aluminium chloride, (P.), B., 431.
 process for improving oils, (P.), B., 431.
 removing aluminium chloride residues from [oil] stills, (P.), B., 431.
 method of making aluminium chloride, (P.), B., 439.
 Macallum, A. B., purpurin method of localising calcium, A., 763.
 Macallum, A. B., See also James, A. A.
 Macallum, A. D., synthesis of iodine compounds of the salvarsan group, A., 965.
 McAmis, A. J., and Felsing, W. A., solubility of hydrogen selenide, A., 17.
 McArthur, fundamental investigations on basic slags, B., 379.
 McArthur, C. D., and Blawknax Co., glass furnace, (P.), B., 980.
 McAulay, A. L., and Bowden, F. P., effect of differential aeration on corrosion; electrode potential measurements, A., 33.
 evidence for a film theory of hydrogen over potential from surface tension measurements, A., 689.
 hydrogen overvoltage at a mercury cathode and its bearing on current theories, A., 804.
 McAulay, J. M., influence on the solubilities of salts in water of the addition of a non-electrolyte, A., 1089.
 Macanlay, J. M., polishing of surfaces, A., 998.
 Macaux, H., and Société Lyonnaise des Eaux et de l'Eclairage, gasifying and carbonising coal and like substances, (P.), B., 120*.
 McBain, H. T., Alexander, J. E., Genberg, G., and Mekoosa-Edwards Paper Co., process for making paper pulp, (P.), B., 48.
 McBain, J. W., apparent viscosity of colloidal solutions and a theory of neutral colloids as solvated micelles capable of aggregation, A., 351.
 theories of adsorption and the technique of its measurement, A., 467.
 fundamental principles of colloid chemistry, A., 1085.
 McBain, J. W., and Bakr, A. M., sorption balance, A., 493.
 McBain, J. W., Dubois, O. E., and Hay, K. G., salt errors of indicators caused by standard alkaline buffers themselves, A., 590.
 McBain, J. W., and Elford, W. J., equilibria underlying soap-boiling processes; system potassium oleate-potassium chloride-water, A., 368.
 McBain, J. W., Harvey, C. E., and Smith, L. E., apparent viscosity of solutions of nitro-cotton in various solvents, B., 482.
 McBain, J. W., and Hopkins, D. G., adhesives and adhesive action, B., 557.
 films of adhesives, B., 291.

McBain, J. W., and Pitter, A. V., relative concentrations of various electrolytes required to salt out soap solutions, A., 672.

McBain, J. W. See also Britton, G. T., and Randall, M.

Macbeth, A. K., Nunan, T. H., and Traill, D., labile nature of the halogen atom in organic compounds. XII. Halogen compounds of barbituric acids, A., 816.

Macbeth, A. K. See also Hirst, E. L.

McBain, J., electrical apparatus for generating ozone, (P.), B., 677*.

McCallum, J. See Utley, H. H.

McCance, A., balanced reactions in steel manufacture, B., 364.

McCance, R. A., tyrosinase, its action on phenols, tyrosine, and other amino acids, A., 203.

colorimetric method of determining pentoses, A., 1233.

McCandlish, D., and Atkin, W. R., treatment of hides and skins for manufacture into leather, (P.), B., 206*.

McCandlish, D., and Salt, H., leather dyeing. II, B., 153.

MacCarthy, G. R., iron coloration in rocks and minerals, A., 205, 933.

relationship between soluble iron and colloids in certain residual clays, B., 207.

MacCarty, S. H. See Graham, G. S.

McCaughay, W. J., and Harrison, H. C., equilibrium considerations of cyanite-clay refractories. II, B., 631.

McCay, C. M., and Schmidt, C. L. A., dissociation constants of racemic proline and certain related compounds, A., 354.

synthesis of pyrrole- and pyrrolidone-carboxylic acids and of pyrrole-2-carboxylic acid, A., 957.

McCay, C. M. See also Nelson, V. E.

McClave, J. M., and Bituminous Sand Co., separation of hydrocarbons from earthy matter, (P.), B., 814.

McClelland, E. W., and Gait, A. J., derivatives of 2-keto-1:2-dihydrobenzothiazole ("2-thiobenzimide"), A., 743.

McClelland, W. R. See Traill, R. J.

McClendon, J. F., Humphrey, G. J., and Loucks, M. M., portable calorimeter for determination of oxygen and carbon dioxide, A., 1067.

McClure, C. W., Vance, E., and Greene, M. C., liver function. I. Determination of bile acids and pigments in duodenal contents, A., 194.

McCluskey, K. L., distribution of phosphorus compounds in the blood in tuberculosis, A., 860.

McCluskey, K. L., and Eichelberger, L., preparation of sodium aurothiosulphate, (P.), B., 255.

McCollum, E. V., Simmonds, N., and Becker, J. E., experimental rickets. XXVII. Variation in vitamin-D content of butter fat, A., 1279.

McCollum, E. M. See Fisher, H. L.

McComb, W., and Heyman, W. A., sterilisation and clarification of liquids, (P.), B., 606.

McComb, W. M., apparatus for converting higher boiling-point hydrocarbon oils into lower boiling-point oils, (P.), B., 526.

McConnell, F. J. See Brady, F. L.

McConnell, J. R., process of treating hydrocarbons, (P.), B., 701.

McConnell, T., apparatus for dyeing or otherwise treating yarns and other materials, (P.), B., 357*.

apparatus for treating yarn or other fibrous material [under tension] with a liquid, (P.), B., 741*.

McCool, M. M., and Romaine, J. D., soil and plant relationships, B., 799.

McCormack, C. P., beneficiation of [iron] ores, (P.), B., 412.

McCormick, J. A. See Fink, G. J.

McCourt, C. A., treating ores, (P.), B., 163.

McCoy, H. N., and Lindsay Light Co., manufacture of titanium sulphate, (P.), B., 12.

McCrady, M. H. See Dunham, H. G.

McCras, J., modification of the Gillespie approximate method of determining hydrogen-ion concentration [of water], B., 613.

McColluch, L., rapid corrosion of metals within capillaries, A., 806.

passivity and corrosion of iron, B., 949.

McCullough, M., and O'Neill, F. J., quantitative changes in blood-sugar and blood lactic acid in canine anaphylaxis, A., 192.

McCurdy, W. H., absorption and resonance radiation of excited helium, A., 101.

absorption and resonance radiation in excited helium and the structure of the 3839 line, A., 549, 985*.

McCurdy, W. H., and Bräunley, A., changes in the refractive index of helium produced in a glow discharge, A., 456.

McCurdy, W. H., and Dalton, P., low-voltage discharges in helium, A., 448.

McCurdy, W. H. See also MacNair, W. A.

McDermott, P. J. See Cox, K.

Macdonald, D. B., treatment of waste cinematographic films, (P.), B., 517*.

McDonald, F. G. See Bills, E. C.

Macdonald, J. See Irvine, (Sir) J. C.

McDonald, J. F., Levine, V. E., and Gleason, M., uric acid metabolism; production of uric acid by bacteria, A., 1977.

Macdonald, J. Y., and Hinshelwood, C. N., formation and growth of silver nuclei in the decomposition of silver oxalate, A., 134.

Macdonald, R., jun. See Richmond, H. A.

McDonnell, C. C., and Hart, L., deterioration of commercially packed chlorinated lime [bleaching powder], B., 404.

McDonnell, H. B., quick method for the determination of ozone, B., 273.

McDonnell, J. S. See McDonnell, R. R.

McDonnell, R. R., and McDonnell, J. S., apparatus for making water-gas, (P.), B., 813.

MacDougal, D. T., effect of lipins in interchanges between cells and the environment, A., 1172.

permeability in plant-cells, A., 1182.

MacDougal, D. See King, J. G.

MacDougal & Yalding, Ltd., and Fryer, P. J., insecticides, sheep dips, and the like, (P.), B., 293.

MacDougal & Yalding, Ltd. See also Fryer, P. J.

McDowall, F. H., preparation of ethylene bromohydrin, A., 381.

McDowell, J. C., treating textile fibres, (P.), B., 50.

McDowell, J. S., mineralogy of clay. I, B., 240.

racial analysis of clay. II., B., 240.

McDowell, S. J., and Kraner, H. M., effect of heat on the strength of calcined kieselguhr-Portland cement mixtures, B., 128.

MacE, L. A. See List, A. E. A. P.

Macela, I., and Seliskar, A., influence of temperature on the equilibrium between oxygen and haemoglobin of various forms of life, A., 634.

McElvain, S. M., piperidine derivatives. III. 3-Carboxethoxy-1-alkyl-4-piperidyl benzoates. III. 3-Carboxethoxy-1-alkyl-4-piperidyl-p-aminobenzoates, A., 1044.

McEntire, F. W., centrifugal separator, (P.), B., 224*.

MacEwen, S. R., preparation of solutions of derivatives of di[hydr]oxydiamino-arsenobenzene, (P.), B., 646.

McEwen, W. L. See Johnson, J. R.

MacGee, A. E., heat required to fire ceramic bodies, B., 488.

MacGee, J. M. See Speehr, H. A.

MacGee, M., electrode connexions for electric furnaces, (P.), B., 447*.

McGeorge, W. T., influence of aluminium, manganese, and iron salts on the growth of sugar cane, and their relation to the infertility of acid island soils, B., 169.

McGill, W. J. See Wagener, L. R.

McGinty, D. A., and Gesell, R., chemical regulation of respiration. II. Accumulation of lactic acid in the isolated brain during anaerobic conditions and the rôle of lactic acid as a continuous regulator of respiration, A., 967.

McGinty, D. A., and Lewis, H. B., lipase. III. Hydrolysis of esters of dicarboxylic acids by hepatic lipase, A., 640.

McGivern, W. J., Foster & Co., Ltd., J. H., and Swift, R., bituminous emulsions [for treating roads], (P.), B., 587.

McGlynn, W. See Coombs, F. A.

McGookin, A., and Heilbron, I. M., tannin occurring in the kino of *Eucalyptus calophylla*, A., 409.

McGookin, A., and Sinclair, D. J., isomerism of styryl alkyl ketones. II. Isomerism of homologues of 2-hydroxystyryl and of 3-methoxy-4-hydroxystyryl methyl ketones, A., 69.

Isomerism of styryl alkyl ketones. III. Methoxy-2- and 4-hydroxystyryl alkyl ketones, A., 838.

McGowan, J., and Hunter, J., emulsifying apparatus, (P.), B., 904*.

MacGregor, J., and Scott & Co. Ltd., E., apparatus for extraction of oils, fat, waxes, resins, and greases from substances containing them, (P.), B., 923.

MacGregor, J. See also McKellar, D.

McGnire, J. C., steel, (P.), B., 1018.

McGuire, P. J., and Dorr Co., manufacture of sugar, (P.), B., 561.

Mach, determination of alkaloids in lupins, B., 214.

Mach, F., and Lepper, W., determination of thallium in mouse poisons, B., 390.

determination of free acid in silage, B., 644.

determination of crude fibre in the presence of products of animal origin, B., 644.

Mach, F., and Sindlinger, F., determination of nicotine by the method of Ulex, B., 253.

McHaffie, I. R., effect of the presence of an "indifferent" gas on the concentration and activity of a vapour in equilibrium with a condensed phase or system of condensed phases, A., 355.

apparatus for analysis of small amounts of vapour in permanent gases, A., 700.

device for circulating fluids under high pressure, B., 255, 567*.

McHargue, J. S., manganese and plant growth, A., 438.

copper, manganese, and zinc as factors in the metabolism of animals, A., 972.

Macheben, M., micro-determination of phosphorus in blood, A., 1067.

Macheben, M. See also Bertrand, G.

Macleod, R., solubility of salts, A., 467.

McHenry, M. J. See Popov, S.

Machiguchi, E., and Shirono, S., determination of morphine in opium, B., 27.

McHugh, G. P. See Brady, O. L.

McHutchison, J. P., adsorption experiments with radium-D and radium-E, A., 655.

electrodeposition of radium-D and -E, A., 804.

temperature of maximum density of alcohol-water mixtures, A., 895.

electrolysis of radium-D and -E, A., 990.

McIlhenney, H. R., and Vulcan Detering Co., electrodeposition of tin, (P.), B., 922.

MacInnes, D. A., ionisation of weak electrolytes, A., 906.

MacInnes, D. A., Cowperthwaite, I. A., and Blanchard, K. C., moving-boundary method for determining transference numbers. V. Constant current apparatus, A., 1008.

MacInnes, D. A., and Shedlovsky, T., relative intensities of reflexion of X-rays from the principal atomic planes of fluorite, A., 459.

MacInnes, D. A. See also Harris, L.

MacIntire, W. H., influence of form, soil zone, and fineness of lime and magnesia incorporations upon outgo of calcium and magnesium, B., 640.

influence of form, soil zone, and fineness of lime and magnesia incorporations upon the outgo of sulphates and nitrates, B., 799.

reciprocal repression by calcic and magnesic additions in surface soil, B., 892.

MacIntire, W. H., and Shaw, W. M., disintegration of limestone and dolomite separates as influenced by zone of incorporation, B., 24.

fixation of calcium-magnesium from burnt limes, limestone, and dolomite incorporations in two soil zones, B., 892.

McIntosh, D., oxonium compounds, A., 144.

McIntosh, F. F., effect of phosphorus on the endurance limit of low-carbon steels, B., 827.

McIntosh, J. F. See Van Slyke, D. D.

McIntyre, J., machines for grinding, refining, and mixing cocoa beans, chocolate, chemicals, etc., (P.), B., 650*.

McIntyre, W. A., development of sillimanite refractories for glass making, B., 555.

experimental tank blocks, B., 745.

McIvor, M. A., Redfield, A. C., and Benedict, E. B., gaseous exchange between the blood and the lumen of the stomach and intestine, A., 537.

Mack, E., jun. See Church, W. H.

McKail, D., prophylaxis in industrial lead poisoning, B., 302.

McKain, T. L., pulveriser, (P.), B., 520.

McKay, A., centrifugal dryer, (P.), B., 391.

preparing paper half-stock, (P.), B., 1010.

Mackay, H. A., bituminous emulsions, (P.), B., 15.

Mackay, H. S., extraction of copper from ores, concentrates, and residues, (P.), B., 673.

electrochemical treatment of copper ores, (P.), B., 921*.

Mackay, P. A., manufacture of titanium oxide, (P.), B., 876.

McKee, W. E. See Bendixen, N.

McKee, M. C., and Smith, A. H., nitrogenous constituents of the cauliflower bud. I. Protein fractions, A., 1183.

McKee, R. H., motor fuel, (P.), B., 230.

McKee, R. H., and Donaldson, J. G., producing ferrozirconium, (P.), B., 196.
 McKee, R. H. See also Cahle, D. E.
 McKee, R. M., and Salls, C. M., [manufacture of] sulphuryl chloride, (P.), B., 406.
 McKeeffe, E. P. See Bradley, L.
 McKeahan, L. W., significance of magnetostriction in "permalloy," A., 892.
 McKeahan, L. W., and Cioffi, P. P., magnetostriction in "permalloy," A., 891.
 McKellar, D., and MacGregor, J., de-waxing, de-greasing, or de-oiling textile fabrics, (P.), B., 913*.
 McKenzie, A., and Denner, W. S., dehydration of glycols derived from α -naphthylglycolic acid, A., 834.
 McKenzie, A., Roger, R., and Wills, G. O., elimination of the amino-group of tertiary amino-alcohols. III. Preparation of optically active ketones, A., 610.
 McKenzie, A., and Tattersall, H. J., conversion of α -phenyl- α -naphthylglycolic acid into ketones, A., 66.
 Mackenzie, B. F. See Kendall, E. G.
 Mackenzie, H. J., Steenbergh, A. W., and Bataafsche Petroleum Maatschappij, obtaining commercial gasoline from natural-gas gasoline, (P.), B., 184.
 Mackenzie, (Miss) M. R. See Bolam, T. R.
 Mackenzie, W. A., remarkable correlation between [yields of] grain and straw, B., 506.
 McKeown, A. See Griffith, R. O.
 MacKesson, C. L., curing concrete in a semi-arid climate, B., 403.
 MacKesson, C. L. See also Gonnerman, H. F.
 Mackey, L., and Garrod, A. E., congenital porphyriuria, A., 1169.
 Macklin, A. P., and Garland, F., [alcohol-ether] fuels, (P.), B., 621.
 McKinley, E. B., and Fisher, N. F., effects obtained from feeding fresh adrenal cortex, medulla, and whole gland to the standard white rat, A., 643.
 Mackov, F. F. See Egorov, M. A.
 McLeachlan, C. G., froth flotation explained by X-rays, B., 96.
 MacLeachlan, J. C., reducing heavy liquid substances to dry finely-powdered form, (P.), B., 808.
 MacLeachlan, J. M., apparatus for finely dividing and drying fluid substances, (P.), B., 808.
 McLang, J., detection of vanillin; sensitivity of the nitric acid test, B., 767.
 McLaren, E., apparatus for carburetting coal gas [with petrol or the like], (P.), B., 6*.
 McLaughlin, G. D., and Highberger, J. H., bacteriology of goat skin soaking, B., 599.
 McLaughlin, G. D., and Moore, E. K., preparation of sheep skins, B., 599.
 McLaughlin, W. B., fermenting or curing cocoa [cacao] beans, (P.), B., 383.
 McLaughlin Coal Reduction Co. See Williams, W. C.
 MacLanrin, D. See MacLanrin, J. D.
 MacLanrin, J. D., and MacLanrin, D., coating of paper, fabrics, and other web and sheet material, (P.), B., 627.
 McLay, A. B. See McLennan, J. C.
 McLennan, H. C. See Joffe, J. S.
 Maclean, H. S., and Hoffert, (Miss) D., carbohydrate and fat metabolism of yeast. III. Nature of the intermediate stages, A., 642.
 McLean, W., effect of leaf-roll disease in potatoes on the composition of the tuber and "mother tuber," A., 762.
 McLennan, J. C., and Iretton, H. J. C., structure of the mercury green line 5460.74 Å. and of the Balmer lines of hydrogen, A., 2.
 McLennan, J. C., Iretton, H. J. C., and Thompson, K., phosphorescence of nitrogen, A., 1081.
 McLennan, J. C., and McLay, A. B., absorption spectra of various elements in the ultra-violet, A., 8.
 structure of the arc spectrum of manganese, A., 766.
 structure of the arc spectrum of platinum, A., 766.
 structure of the arc spectrum of gold, A., 876.
 McLennan, J. C., McLay, A. B., and Smith, H. G., atomic states and spectral terms, A., 874.
 McLennan, J. C., McLeod, J. H., and McQuarrie, W. C., oxygen spectral line 5577.35 Å., A., 955.
 McLennan, J. C., and Smith, H. G., series spectrum of palladium, A., 766, 875.
 McLennan, J. C., Smith, H. G., and Peters, C. S., infra-red spectra of certain elements, A., 107.
 McLennan, J. C., and Wilhelm, J. O., crystal structure of carbon dioxide, A., 13.
 MacLeod, G., Crofts, E. E., and Benedict, F. G., basal metabolism of some Orientals, A., 428.
 MacLeod, G. See also Rose, M. S.
 MacLeod, H. N., recovery of the solid constituents of liquids, (P.), B., 392, 521*.
 MacLeod, J. H. See McLennan, J. C.
 MacLeod, J. J. R. See Chaikoff, I. L., and Karczag, L.
 McMath, A. M. See Read, J.
 MacMillan, A. See Drummond, A. M.
 MacMillan, H. J. See Robbins, H. B.
 MacMillan, J. R., and Niagara Alkali Co., process of making thin boiling starch, (P.), B., 210.
 MacMillan, J. R., and Niagara Pigment Corporation, manufacture of [iron] oxide pigments, (P.), B., 889.
 McMiller, P. R., concentration of carbonates in two Minnesota soil types, B., 793.
 MacMullin, R. B., automatic apparatus for determining the m. p. of organic compounds, A., 593.
 Macnair, P. M., slag reactions, B., 367*.
 McNair, W. A., fine structure of certain lines and energy levels of cadmium, A., 986, 1071*.
 MacNair, W. A., and McCurdy, W. H., structure of the D_3 -line of helium, A., 213.
 McNally, C. P., ionisation constant of creatinine, A., 577.
 McNamee, R. L., graphical chemistry in water softening, B., 724.
 Macnaghtan, D. J. See Long, C. L.
 MacNeal, W. J., and Killian, J. A., polychrome methylene-blue, A., 531.
 McNeil, R. S., and Cochrane Corporation, indicating the progress of chemical reactions [water softening], (P.), B., 726.
 McNitt, R. J., electrolyzing fused baths, (P.), B., 247*.
 McNulty, (Miss) S. A. See Orndorff, W. R.
 McNulty, P. See Ryan, H.
 McNutt, W. A., and Kitson Engineering Co. (London), Ltd., refrigerating apparatus, (P.), B., 224*.
 McPetrie, J. S., time of excitation of hydrogen atoms, A., 652.
 McPherson, A. T. See Curtis, H. L.
 Macpherson, H., Simpkin, N., and Wild, S. V., pyritic oxidation in relation to the spontaneous combustion of coal, B., 1001.
 McQuan, G., constitution of sucrose. I. Oxidation of tetramethyl- γ -fructose. II. Oxidation of d-arabinose, A., 941.
 McQuarrie, J., and Shohol, A. T., colorimetric determination of p_K of cerebrospinal fluid, A., 442.
 McQuarrie, W. C., analysis of the spectra of thallium by electrodeless discharge, A., 2.
 McQuarrie, W. C. See also McLennan, J. C.
 MacQuigg, C. E., and Electro Metallurgical Co., carbonising box, (P.), B., 283.
 Macurevitsch, I., action of aromatic amines on semicarbazide hydrochloride, A., 161.
 preparation of thiosemicarbazones and semicarbazidesemicarbazones of cyclohexenones and investigation of the properties of the latter compounds, A., 169.
 preparation of phenylcarbamic acid hydrazones of cyclohexenones, A., 170.
 thiosemicarbazones and semicarbazidesemicarbazones of cyclohexanones, A., 621.
 preparation of primary aliphatic amines by the reduction of phenylhydrazones and oximes of aldehydes and ketones, A., 824.
 reduction of aliphatic and aromatic aldehydes and ketazines by aluminium amalgam, A., 824.
 McVeety, P. G. See Lynch, T. D.
 McVicker, W. H., Marsh, J. K., and Stewart, A. W., Tesla-luminescence spectra. VI. Amino-derivatives, A., 222.
 Macy, R., and Thomas, E. W., system sodium iodide-acetone-water, A., 799.
 Madaev-Sitschev, O. See Namekin, S.
 Madden, D. See Reilly, J.
 Madden, F. C. See Garner, W. E.
 Maddison, R. E. W., electro motive behaviour of cupric oxide, A., 130, 579*.
 Maddison, R. E. W. See also Cunliffe, P. W.
 Madel, W. R. See Hinkel, L. E.
 Madsen, C. P., and Madsen Corporation, treating metallic objects; coated metallic article, (P.), B., 97.
 electrodeposition of metals, (P.), B., 590.
 Madsen Corporation, electrodepositing nickel, cobalt, or nickel alloys, (P.), B., 163.
 electro-thermally treating ferrous metal objects, (P.), B., 444.
 Madsen Corporation. See also Madsen, C. P., and Pedersen, A. Z.
 Maeda, T., viscosity changes in the reaction between magnesia and aqueous magnesium chloride, and the setting of cement, B., 687.
 Maeda, T., and Yamane, S., constitution of magnesium oxychloride cement, B., 687.
 Maeder, H. See Wolfe, O.
 Magarian, M. C., spectrograms of tungsten K-series rays scattered by graphite, A., 1187.
 Magath, J. B. See Bollmann, T. L.
 Magee, H. E., and Harvey, D., effect of heat on milk. I. Physico-chemical changes. II. Influence of diets of fresh and treated cow's milk on the calcium, phosphorus, and nitrogen metabolism of the young pig, A., 970.
 Magee, H. E. See also Henderson, J. McA.
 Magidson, O., and Menschikov, G. P., quaternary pyridine bases, A., 844.
 Magisiris, H. See Grafe, F.
 Magnin, J., use of lead chloride for the purification of organic liquids in the toxicological investigation of alkaloids, A., 1273.
 Magnus, A., adsorption. X. Wood charcoal as adsorption medium for gases, A., 1001.
 Magnus, A., and Brauer, M., adsorption. VIII. Heat effect of the absorption of carbon dioxide by wood charcoal, A., 346.
 Magnus, A., and Cahn, L., adsorption. IX. Adsorption of gases by wood charcoal at low pressures, A., 1001.
 Magnus, A., and Danz, H., specific heats of tungsten, boron, boron nitride, and beryllium oxide, A., 1197.
 Magnus, A., and Hodler, A., specific heats of silver and diamond in the region of high temperatures, A., 998.
 Magnus, A., and Mannheimer, M., heats of mixing of molten metals, A., 786.
 Magnus, A., and Roth, H., adsorption. VII. Adsorption of mixtures of carbon dioxide and hydrogen by wood charcoal, A., 346.
 Magnusson, H. P. See Neidig, R. E.
 Magtegasal, V., activated charcoal, (P.), B., 779.
 Mahanti, P. C. See Ghosh, P. N.
 Mahin, E. O., Spencer, R. C., and Hayner, C. R., effect of other elements on the migration of carbon in steel, B., 364.
 Mahler, A., blood cholesterol during ether anaesthesia, A., 1172.
 Mahlie, W. S., composition of mud balls [from water filters], B., 142.
 Mahn, J., and Reinhart, M., pharmacological determination of the ergotamine content of commercial ergot preparations, A., 328.
 Mai, H. See Weinland, R.
 Mai, J., tetraphosphorus triselenide, A., 1113.
 Maidana, G. See Fester, G.
 Maier, C. G., adjusted vapour pressures of zinc and cadmium, A., 342.
 Maler, C. G., Parks, G. S., and Anderson, C. T., free energy of formation of zinc oxide, A., 1210.
 Maier, C. G., and Ralston, O. G., reduction equilibria for the system: zinc oxide-carbon monoxide, A., 358.
 Maier, M. See Weinland, R.
 Maige, A., variation of threshold value for amylogenous condensation in different plant cells, A., 548.
 carbohydrate nutrition of the cells and changes in the nucleus and plastids, A., 764.
 Mailhe, A., catalytic decomposition of amides, A., 54.
 decomposition of complex aldehydes, A., 982.
 recovery of paraffin wax from low-temperature tar, (P.), B., 479.
 extraction of wax from lignite, (P.), B., 574.
 Maillard, C. A. See Altweig, J.
 Maillard, L. C., and Wunschendorff, H., formation of protein complexes with hydroxides of tervalent metals; deproteinisation by means of alums, A., 189.
 deproteinisation by means of alum, A., 762.
 Main, V. R., viscosity of aqueous solutions of the sodium silicates, A., 675.
 Maisonne Breton, Fichot & Co., J., and Crut, G. L. A., carriers for dyes, etc., (P.), B., 461.
 production of material [for use in the manufacture of paints] from the fruit of *Rhamnus* species, (P.), B., 595.

Maiss, P. See Rupp, E.
 Maiuri, G. See Anderson, A. E.
 Majithia, S. K. S. See Singh, P.
 Majti, H. See Vesely, V.
 Majumdar, K. See Sru, N. K.
 Makovecki, A. and Schabalin, K. N., sulphatation of burnt pyrites by the action of the gases obtained on roasting, B., 126.
 Makrinoes, I. See Pincussen, L.
 Malachowski, R., cyclic derivatives of acetonedi-carboxylic acid, A., 732.
 synthesis of tricarboxylic acid, A., 1024.
 Malaprade, L., electrometric titration of oxidising acids, A., 490.
 Malaprade, L. See also Travers, A.
 Malbay, R., semi-water-gas producer plants, (P.), B., 5.
 Mal, S. B., cause of change of physical properties of highly dried liquids, and influence of temperature on rate of drying, A., 117.
 Malařevská, N. A. See Malařevský, W. J.
 Malařevský, W. J. and Malařevská, N. A., catalytic oxidation of ammonia under works conditions, B., 60.
 Malik, K. S., viscosities of univalent salts of the higher fatty acids in aqueous solution, A., 1006.
 Malisoff, W. M. See Hill, A. E.
 Maliszewicz, Z., absorption of electrolytes in small intestine, A., 199.
 Malkin, T. See Piper, S. H.
 Mallaabar, H. J., manufacture of cellulose acetate, (P.), B., 975.
 Mallet, L., luminescence of water and organic substances subjected to γ -rays, A., 385.
 Mallison, H., Jacobsen, F., and Sarre, K., determination of the coefficient of cubical expansion of pitches and asphalts, B., 261.
 Mallock, A., hardness of copper-tin alloys, A., 671.
 Mallory, F. B., haemochromatosis and chronic poisoning with copper, A., 976.
 Malm, C. J. See Webb, W. R.
 Malone, L. J., Carroll, S. J., and Eastman Kodak Co., [non-inflammable] cellulose acetate composition [photographic film], (P.), B., 616.
 Malquori, G., double chlorides of caesium and tervalent thallium, A., 809.
 barium aluminates; system Al_2O_3 - BaO - H_2O at 20°, A., 810.
 thermal behaviour of puzzolana and its reaction in the solid state with some alkaline-earth oxides and carbonates, B., 709.
 Malquori, G. See also Partavano, N.
 Malby, J. G., classification of the sugars, A., 822.
 Malvos, R., and Crozemeire, M., furnaces, (P.), B., 408.
 Malyyutin, N. N. See Vlktorov, P. P.
 Mambourg, L., and Libbey-Owens Sheet Glass Co., glass-melting furnace, (P.), B., 879.
 Manca, E. See Vanzetti, B. L.
 Manchot, W., compounds of metallic salts and carbon monoxide. XII. Behaviour of carbon monoxide towards salts of palladium and platinum and separation of palladium and platinum depending thereon, A., 138.
 Manchot, W., [with Gras, O., and Schreeber, A.], equilibrium between metal chloride, hydrogen sulphide, metal sulphide, and hydrogen chloride and its use in separating metals; cadmium, bismuth, and lead, A., 40.
 Manchot, W., and Gall, H., compounds of metallic salts and carbon monoxide. XIV. Compound of potassium cobaltocyanide and carbon monoxide and the valency of the central atom in complex salts, A., 694.
 compounds of metallic salts and carbon monoxide. XV. Metallic carbonyls; carbonyl compound of univalent nickel, A., 698.
 Manchot, W., and König, J., compounds of metallic salts and carbon monoxide. XIII. Compound containing palladium and carbon monoxide, A., 698.
 Manchot, W., and Leber, A., compounds and alloys of titanium and aluminium, A., 119.
 Manchot, W., and Linckh, E., constitution and absorption spectra of ferro- and cupri-nitric-oxide salts, A., 452.
 constitution and absorption spectra of ferronitrososulphide compounds (Roussin's salts) and their relationship to the dissociating ferronitric-oxide salts, A., 453.
 Manchot, W., and Oberhauser, F., volumetric determination of iron in hydrochloric acid solution, A., 40.
 Manchot, W., and Schmid, H., nitroso-compounds of metals; compound of manganese with nitric oxide, A., 1219.
 Manchot, W., and Waldmiller, A., nitroso-compounds of metals; compound of palladium with nitric oxide, A., 1219.
 Mandel, J. A., and Staudel, H., mechanism of chemotherapeutic action, A., 1273.
 Mandel, J. A. See also Deuel, H. J.
 Mandelbaum, M. R., and Nisson, P. S., life of fuller's earth used in the vapour-phase treatment of cracked distillates, B., 663.
 Mandell, W., measurement of temperature by thermocouples in unequally heated enclosures, B., 79.
 Mandl, J. See Streblinger, R.
 Manev, T. J. See Plagge, H. H.
 Manfredi, A. See Charrier, G.
 Mangold, E., and Schmitt-Krämer, C., lactic acid formation in smooth muscle in *rigor mortis*. I. and II., A., 427, 539.
 Manheims, P. J., and Bernhard, A., colloidal gold reaction using gold prepared by an electrical method, A., 1168.
 Manlike, P., and Grigel, P., preparation of acetyl salicylic acid, acetanilide, and acet-p-phenetidine, B., 611.
 Manière, (Mme.) F. See Boutaric, A.
 Manin, Y. See Levaditi, C.
 Manjean, (Mme.) S. See Desgrez, A.
 Manjannah, B. L., and Plant, S. G. P., derivatives of tetrahydrocarbazole. VI. Derivatives of 6-methyltetrahydrocarbazole, A., 1151.
 Mankodi, C. L. See Fox, C. J. J.
 Manley, F. T. See Holmes, R. C.
 Manley, J. J., spectroscopic detection of minute quantities of mercury, A., 376.
 storage of small quantities of gas at low pressures, A., 378.
 mercury helides, A., 486.
 Mann, C. A., mechanism of the formation of lithopone, B., 200.
 Mann, F. C., Sheard, C., Bollman, J. L., and Baldes, E. J., formation of bile pigment from haemoglobin, A., 634.
 physiology of the liver. XIII. Liver as a site of bilirubin formation, A., 857.
 Mann, F. C. See also Bollman, J. L.
 Mann, F. G., complex salts of $\alpha\beta\gamma$ -triaminopropane with copper and platinum, A., 1234.
 Mann, F. G., and Pope, (Sir) W. J., $\beta\beta'\beta''$ -triaminotriethylamine and its complex metallo compounds, A., 53.
 Mann, F. G., and Pope, (Sir) W. J., $\gamma\gamma'\gamma''$ -triaminotripropylamino and its complex compounds with nickel, A., 337.
 complex salts of $\beta\beta'\beta''$ -triaminotriethylamine with nickel and palladium, A., 387.
 metallic complexes with aliphatic polyamines, A., 715.
 configuration of bis-triaminopropane metallic complexes, A., 1233.
 Mann, M. D., jun., Lebo, R. B., and Hunt, S. B., purifying and deodorising isopropyl alcohol, (P.), B., 610.
 Mann, G. See Herzner, R.
 Mann, R. T. See Ulmen, P. C.
 Manneback, C., dielectric constant of diatomic dipolar gases according to "wave" mechanics, A., 993.
 Manners, W. E. See Appleyard, K. C.
 Mannes, L. D., and Godowsky, L., jun., colour photography, (P.), B., 220*.
 Mannesmann Kälte-Ind. A.-G., absorption refrigerating apparatus, (P.), B., 696*.
 refrigerating apparatus working on the absorption principle, (P.), B., 855.
 Mannheimer, M. See Lorenz, R., and Magnus, A.
 Mannich, C., preparation of aminoketones, (P.), B., 614, 611.
 preparation of a mixture of digitalis glucosides, (P.), B., 899.
 preparation of unsaturated β -keto-bases, (P.), B., 901.
 Mannich, C., and Ball, G., piperidine derivatives by interaction of methylamine, formaldehyde, and acetone, A., 522.
 Mannich, C., and Curtaz, K., albumose-silver, B., 214.
 Mannich, C., and Horkheimer, P., derivatives of γ -aminobutyraldehyde and γ -aminobutyl alcohol, A., 503.
 Mannich, C., and Ritsert, K., condensation of ammonium chloride with formaldehyde and acetone, A., 504.
 Mannich, C., and Stein, L., action of formaldehyde and secondary amines on acids with mobile hydrogen atoms, A., 165.
 diastereomer 4-hydroxy-1:4-dimethylpiperidine-3-carboxylic acids, A., 523.
 Manning, J., preparation of nickel membranes for ultra-filtration, A., 706.
 Mannkopff, R., extinction of the resonance fluorescence of sodium vapour, A., 557.
 Manoukian, O. See Eder, R.
 Mansfeld-A.-G. für Bergbau & Hüttenbetrieb, and Wagenmann, K., decomposition of material containing selenium, (P.), B., 539.
 Manshard, E., solubility and rapidity of action of different calcareous dressings, B., 1023.
 Manske, R. H. F. See Ing, H. R.
 Mantell, C. L., utilisation of chlorine in recovery of tin and tin salts from tin-plate scrap, B., 410.
 Manthey, E. See Wartenberg, H. R.
 Mandel, G. D., and Calorizing Co., heat exchanger, (P.), B., 729*.
 Manuel, F. R. See DeLaporte, A. V.
 Manufacture E. Znndel, and Lantz, L., use of sodium silicate in printing [textile fabrics] with vat dyestuffs, B., 86.
 Manufacture des Glaces & Produits Chimiques de St. Gobain, Chauney & Cirey. See Arbeit, P.
 Manzon, A., and Müller, E., humidifying and impregnating textile and other materials, (P.), B., 357*.
 Maracineanu, (Mme.) S., effect of sunlight on the radioactivity of lead and uranium A., 6.
 effect of the sun on the radioactivities of polonium and lead, A., 879.
 Marasco, M., hydroxylamine hydrochloride for the quick determination of acetone, B., 719.
 Marburg, E. See I. G. Farbenind. A.-G.
 Marcelet, H., fluoroscope [for detecting small quantities of fluorescein], B., 527.
 oil extracted from the head of a dolphin, B., 677, 923.
 Marcellin, A., superficial solutions, A., 120.
 Marcesche, E. C., atomising apparatus, (P.), B., 81*.
 manufacture of artificial fuel, (P.), B., 201.
 March, A. J. See Rosenblatt, M.
 Marchal, A. J., recovery of rubber and fabric from old rubber, (P.), B., 290.
 Marchal, (Mme.) G., thermal decomposition of metallo-sulphates, A., 27, 127, 359.
 action of silica on metallic sulphates, A., 487.
 decomposition of metallic sulphates by heat and the influence of certain substances on these reactions, A., 924.
 action of silica on barium and magnesium sulphates, B., 51.
 Marchal, (Mme.) G. See also Matignon, C.
 Marchal, J. See Durham, F. M.
 Marchand, B. de C., and Merwe, C. R. van der, composition of the fractions separated by mechanical analysis from some Transvaal soils, B., 840.
 Marchet, A., hornblends from Lower Austria, A., 266.
 Marchlewski, L., and Nowotrowna, (Mme.) A., absorption of ultra-violet light by natural amino-acids and by ceratoe, A., 222, 335*.
 Marchlewski, L. See also Keplanka, (Mme.) E.
 Marcolongo, A. See Carobbi, G.
 Marquette, P. L. G., utilisation of luminescent and catalytic substances [for X-ray screens], (P.), B., 29.
 Marcovitch, S., diuforescines [silicofluorides] as insecticides, B., 694.
 Marcus, A. See Wolfenstein, R.
 Marcusson, J., polymerisation of fatty oils, V., B., 600.
 lignin and oxycellulose theories of coal formation, B., 809.
 Marçasson, J., and Bauerschäfer, W., catalytic formation of petroleum hydrocarbons from fats, B., 117, 970.
 autoxidation of mineral oils and determination of the tar value, B., 427.
 Marden, J. W., Van Voorhis, C. C., and Westinghouse Lamp Co., production of [refractory] metals, (P.), B., 330.
 Marden, J. W., and Westinghouse Lamp Co., production of refractory oxide ware, (P.), B., 667.
 electron-emission material, (P.), B., 834.
 Marden, J. W. See also Westinghouse Lamp Co.
 Mardles, E. W. J., swelling and dispersion of colloidal substances in ether-alcohol mixtures, A., 213.
 Mardles, E. W. J. See also Sims, C. J.
 Margosche, B. M., Friedmann, L., and Fuchs, K., rapid determination of iodine value of marine animal oils, B., 199.
 Margosches, B. M., and Fuchs, H., chemical nature of fats. III. Significance of the difference between the upper iodine value and iodine value of a fat; differential iodine value, B., 371.
 Margosches, B. M., and Neufeld, E., semi-micro-method for rapid determination of the iodine value [of fats and oils], B., 414.
 Marlam, T. See Akt.-Ges. für Anilin-Fabrik., and I. G. Farbenind. A.-G.
 Marian, J. See Flürth, O.

Marian, S. See Moser, L.

Mariller, C. See Granger, J.

Marino, adsorption on large molecules in solution, A., 673.

Marischnika, C., utilisation of the waste gases from water-gas generators, (P.), B., 84.

Mark, H., röntgenoscopy of colloidal systems, A., 122.

Mark, H., and Pohlard, E., structure of ethane and diborane, B_2H_6 , A., 227.

Mark, H., and Szilard, L., polarisation of X-rays by reflexion from crystals, A., 830.

Mark, H. See also Hauser, E. A., Kallmann, H., and Rosband, P.

Markay, A. See Ryan, H.

Markiewicz, M., and Römer, W., dry cell, (P.), B., 835*.

Markley, K. S. See Hann, R. M.

Markowitz, E. See Samuel, R.

Markowitz, W. See Thannhauser, S. J.

Markowitz, J., and Hough, H. B., blood diastases in depauperated dogs, A., 426.

Markowitz, J. See also Campbell, W. R., and Chaikoff, I. L.

Marks, A. See United States Metals Refining Co.

Marks, H. P., effect of thyroid feeding on sugar tolerance, A., 644.

Marks, H. P. See also Best, C. H., and Burn, J. H.

Marley, S. P. See Livingstone, C. J., and Stevens, D. R.

Marmasse, P. See Lebeau, P.

Marmasse, P., and De Gaalon, P., separation of textile from rubber in rubber goods, (P.), B., 453.

Martoff, D., milling and panification with cereals other than wheat, B., 992.

Martoff, D., and Di Stefano, F., rational milling of maize, B., 26.

Mardau, F. F., recovering ammonium sulphate [from coal-gas], (P.), B., 699.

Mardau, J. C. See Hucker, G. J.

Marquès, T. R. Y. See Fourneau, E.

Marquis, R., oxidation of acenaphthene, A., 722.

Marr, H. N., determination of tin in non-ferrous alloys, B., 588.

Marrack, V. J., and Thacker, G., state of calcium in body fluids, A., 855.

Mariott, R. H. new and old theories of the bathing process, B., 682.

Mariott, R. H. See also Kaye, M.

Mariott, W. McR. See Howland, J.

Marris, H. C. See Ross, H. C.

Marschalek, C. H., manufacture of perylene, (P.), B., 869.

Marschall, F. See Farbw. vorm. Meister, Lucius, & Brüning.

Marsh, H. S., Cochran, R. S., and American Copperas Co., pickling [bath for metals], (P.), B., 330.

Marsh, J. E., reclaiming spent pickling solutions, (P.), B., 708.

Marsh, J. E., treatment of stone, metal, or other materials in order to clean and preserve them, (P.), B., 1015.

Marsh, J. K. See Capper, N. S., and McVicker, W. H.

Marsh, J. W., and Aische, M. I., size softener [for textiles], (P.), B., 189.

Marsh, L. G. See Wyant, L. D.

Marsh, R. P., iron solubility tests in culture solutions at different p_H values, A., 209.

Marshall, A. G., lubricating compound, (P.), B., 42*.

Marshall, A. L., mechanism of the photochemical reaction between hydrogen and chlorine, II., A., 34.

photosensitisation by optically excited mercury atoms; the hydrogen-oxygen reaction, A., 252.

photochemical reaction between hydrogen and chlorine, A., 484.

mechanism of the photochemical reaction between hydrogen and chlorine, III. Mean life of activity in illuminated chlorine, A., 808.

mechanism of reactions photosensitised by mercury vapour, A., 919.

electrodeposition of zinc from sulphate solutions, B., 328*.

Marshall, A. L. See also Taylor, H. S.

Marshall, A. L., prevention of embrittlement in malleable cast-iron, B., 490.

Marshall, M. J. Shaw, G. S., and Canadian Electro Products Co., manufacture of acetic anhydride and acetaldehyde from ethylidene diacetate, (P.), B., 613.

Marshall, R. P. See Hunt, N. R.

Marshall, S. C., and Salomon, M. S., lime plp oil, B., 552.

Marson, C. B., influence of the ash constituents in the carbonisation and gasification of coal, B., 970.

Marson, C. B., and Cobb, J. W., influence of ash constituents in carbonisation and gasification of coal, II., B., 1002.

Marienssen, O. See Ges. für technische Instrumente G.m.b.H.

Mariin, C. J., and Lepper, E. H., micro-determination of the hydrogen-ion concentration of capillary blood, A., 442.

influence of temperature on the p_H of blood, A., 1105.

extent to which electrometric determination of the hydrogen-ion concentration of hydrogen carbonate solutions is interfered with by production of formic acid at the electrode, A., 1212.

Martin, C. J. See also Lepper, E. H.

Martin, E., manufacture of aluminous cements, (P.), B., 409, 918*.

ferruginous and aluminous cements, B., 586.

manufacturing process for cements containing iron and alumina combinations, (P.), B., 668.

Martin, E. A. See Peterson, W. H.

Martin, E. J. See also Lepper, E. H.

Martin, E. See Rhenania Verein Chem. Fabriken A.-G.

Martin, G., Bowes, E. A., and Christelow, J. W., theory of fine grinding, II., B., 303.

Martin, G., Bowes, E. A., and Turner, F. B., theory of fine grinding, III., B., 903.

Martin, G., and Davey, W. S., effect on mechanical properties of the formation of colloidal precipitates during vulcanisation of rubber, B., 555.

Martin, H. See Goodwin, W.

Martin, H. E., progressive carbonisation in rotary electric furnaces, B., 982.

Martin, H. S. See Chance Bros. & Co., Ltd.

Martin, J. H., preparation of fur for shrinking and felting, (P.), B., 913.

Martin, J. H. See also Bückner, C. D.

Martin, L. C., colour measurement and standardisation, B., 479*.

Martin, P. J., and Bertels, O. F., decarbonisation of cast iron or other metals, (P.), B., 132.

Martin, W. H., scattering of light by anisotropic liquids, A., 15.

Martin, W. H., and Cole, A. F. W., scattering of light in gaseous and liquid chlorine, A., 559.

Martin, A., new complex metallic compounds with pyrocatechol and their application to microchemical analysis, A., 1244.

Martland, M., and Robison, R., possible significance of hexosephosphorol esters in ossification. VI. Phosphoric esters in blood-plasma, A., 968.

Martz, E. See Wieland, H.

Maryl, S., rennin. I. Effect of previous heating on the coagulability of caseinogen. II. Replaceability of calcium by other cations. III. Replaceability of phosphate by other substances, A., 866.

Marvel, C. S., and Broderick, A. E., composition of the yellow oil obtained in the manufacture of *n*-butyl alcohol by fermentation, B., 104.

Marvel, C. S., Gauerke, C. G., and Hill, E. L., identification of primary alkyl bromides and iodides, A., 144.

Marvel, C. S. See also Gray, A. E., Hunger, F. D., and Sandborn, L. T.

Marvin, C. J. See Walker, M.

Marvin, J. B., fun, making [anthraquinone] dyes, (P.), B., 577.

Marweig, J. See Rhenania Verein Chem. Fabriken.

Marx, C., and Union Sulphur Co., producing purified sulphur, (P.), B., 406.

producing purified sulphur from impure sulphur or ores containing it in elemental form, (P.), B., 407.

Marx, E., reaction constants, life-periods, recombinations, interchange numbers in gas flames, and saturation potentials, A., 1187.

Marx, K. See I. G. Farbenind. A.-G.

Masaki, O., effect of evaporation of a photographic plate on its sensitivity, B., 693.

Mascarenhas, V. M. See Sudborough, J. J.

Maschinendienst-Akt.-Ges. Balcke, evaporation of brine, (P.), B., 322.

Maschinendienst-Anstalt Dampfkesselfabrik Akt.-Ges. Darmstadt, vorm. Vennleth & Ellenger, Göhrig & Leuchs, and Steinbrückner, A., burning of gypsum, (P.), B., 790.

Maschinendienst-Humboldt, manufacture of pulp, (P.), B., 153.

preparation of colloids by condensation from molecular solutions, (P.), B., 177.

preparation of very finely divided solids, (P.), B., 268.

manufacture of viscose solution, (P.), B., 268.

preparation of sulphur soap, (P.), B., 449.

process for extracting the organs of animals, plants, etc., (P.), B., 805.

Maschinendienst Oerlikon, manufacture of a refractory plastic mass [for crucibles], (P.), B., 129.

preservation of oil used in electrical apparatus, (P.), B., 446.

Maschkileiss, B. E. See Rakuzin, M. A.

Maschmann, E., bismuth compounds, II., A., 311.

organic compounds of arsenic. II. Mercurated arylarsenic acids, A., 418.

behaviour of arsenobenzenes towards molecular oxygen. I. and II., A., 851.

mechanism of mercuration, I. and II., A., 1265.

Mase, R. P., and Mine Safety Appliances Co., gas-purifying composition [for removing ammonia from gases], (P.), B., 126.

Mashino, M., decomposition of soya-bean protein. I. Decomposition by hydrochloric acid. II. Decomposition by sulphuric acid, A., 1048.

Mashiyama, Y. See Shoji, H.

Masing, O., recrystallisation and recovery (improvement of the crystalline structure) of metals, A., 564.

Masing, G., and Dahl, O., expansion of iron-containing aluminium on solidification, B., 750.

solidification of aluminium containing iron, B., 882.

Masing, G., and Koch, L., loss of zinc by brass in corrosion, B., 325.

Masing, G., and Miethling, K., action of brass on cuprous chloride, A., 486.

Maslow, H. L., and Davison, W. C., methods for measuring rate of hydrolysis of starch and dextrin by taka-diastase; effect of p_H on starch-liquefying power of taka-diastase; effect of p_H on dextrin-liquefying power of taka-diastase, A., 757.

Masner, L., and Berestovoi, N. J., extraction of chromium from leather, B., 958.

Masner, L. See also Berestovoi, N. J.

Mason, C. W., structural colours in insects. I., A., 538.

Mason, C. W., and Chamot, E. M., microscopical detection of bromides, hypobromites, and bromates by means of *m*-phenylenediamine, A., 1220.

Mason, E. H., influence of dihydroxyacetone on the blood-sugar and glycosuria, A., 1054.

Mason, F. A., synthesis of 1 : 2-dihydro-2-methylquinoline, A., 735.

Mason, R. B., and Mathews, J. H., decomposition potentials and polarisation of certain heavy metallic chlorides dissolved in anhydrous pyridine, A., 31.

determination of transition points in non-aqueous solutions by the electro-motive force method, A., 127.

effect of ultra-violet light on the oxidation of sodium sulphite by atmospheric oxygen [in presence of catalysts], A., 485.

Mason, W. H., low-temperature explosion process of disintegrating wood, (P.), B., 705.

Massenet, A. A. M., desulphurisation of oils, hydrocarbons, and tars, (P.), B., 231.

Massey, W. F. See British Thomson-Houston Co., Ltd.

Massy, R., polarimetric examination of cade oils, B., 804.

Masters, E. See Gibbons Bros. Ltd.

Martin, H., and Rees, H. G., heat coagulation of egg-albumin, A., 1049.

Masucci, P., and Mulford, H. K., Co., irritant product from *Rhus* plants, (P.), B., 76.

Masuda, T., [pharmacological] determination of the ergotamine-ergotoxin titre of ergot, A., 328.

Masumoto, B., camphor series. X. Synthesis of camphor. I. Catalytic action of reduced copper on boronels, A., 175.

Masuyama, Y. See Honda, K.

Materiel Téléphonique Société Anonyme, hard [lead] alloys, (P.), B., 245.

Mathas, R. A. See Rhodes, F. H.

Mathes, P. [oil] still and method of distilling, (P.), B., 733*.

Mathers, F. C., and Briscoe, H. B., method of treating limestone, (P.), B., 708.

Mathers, F. C., and National Lime Association, process of treating lime, (P.), B., 584.

Mathesius, H. See Mathesius, W.

Mathesius, W., and Mathesius, H., production of titanium steel free from carbon, (P.), B., 754.

purifying blast-furnace gases, (P.), B., 862.

Mathivet, J., use of paper pulp in vacuum filtration, A., 700.

Mathews, J. A., retained austenite, B., 132*.

steel age—1876 to 1926, B., 832*.

Mathews, J. H., accurate measurement of heats of vaporisation of liquids, A., 462.

Mathews, J. H. See also Mason, R. B.

Mathias, E., colour and composition of thunderbolts, A., 143.

Mathiesen, O. E., firing stoneware in an open kiln, B., 824.

Mathiesen, E. See Goldschmidt, H.

Mathiesen Alkali Works, and Evans, G. S., purification of iron, (P.), B., 833*.

Mathieson Alkali Works. See also Evans, G. S., George, A., and Stockelbach, F. E.

Mathur, B. N. See Rogers, A.

Mathur, K. N. See Bhatnagar, S. S.

Mathus, L., action of nitriles on organo-magnesium compounds; chloroacetonitrile, A., 55.

Mathus, L., and Gibon, F., derivatives of dipropyl ketone, A., 272.

Mathus, L. See also Braylants, P.

Matignon, C., and Cathala, J., preparation of beryllium chloride by the action of carbonyl chloride on beryllium oxide, A., 260, 486.

Matignon, C., and Marchal, (Mme.) G., thermochemistry of beryllium, A., 28, 476.

Matignon, C. See also Copaux, H.

Matlock, C., and Gasoline Corporation, treating [cracking] hydrocarbon oils, (P.), B., 733.

Matsuda, T., effect of cold working and annealing on some physical properties of copper, aluminium, and their alloys, B., 93.

Matsui, M., Nanai, E., Ito, S., and Fukushima, S., dissociation pressures and the transition point of sodium sulphate dehydrate, A., 1007.

Matsui, M. See also Hayashi, H.

Matsukite, Y., dielectric constants of liquids. I. Measurement of dielectric constants of liquids, A., 110.

Matsukata, G. See Neill, J. W.

Matsumoto, B., hydrogen-ion concentration and acid-combining power of the mother's milk in infantile beriberi, A., 1270.

Matsunami, S., sterilisation of tropacocaine hydrochloride and its solution, B., 75.

Matsuno, K., mechanism of the substitution reaction of *trans*-dichloroethylene-diamincobaltic chloride in aqueous solution, A., 1214.

Matuyama, F. See Suzuki, U.

Matt, H., imparting a linen-like character to cotton, (P.), B., 437.

Mattanoh, J., existence of the sub-electron, A., 880.

Mattathad, K., low-temperature distillation of coal, shale, and wood, (P.), B., 861.

Mattath, A. See Weygand, C.

Matthew, J. A., effect of sizes on the elastic behaviour of flax yarns, B., 530.

Matthews, E., interaction of sulphur dioxide and hydrogen sulphide, A., 1108.

Matthews, E. S., producing nitrogen compounds, (P.), B., 665.

Matthews, J. M., and Glorient, Inc., dye compositions [for dyeing silk], (P.), B., 703.

Matthews, M. A., reactions of the *meso*-hydroxyanthrones, A., 295.

Matthews, M. A. See also Barnett, E. de B.

Matthews, W. E. See Lambert, E.

Mathias, F. See Haber, F.

Matthe, R., purifying molten metal [steel], (P.), B., 61.

Mattick, A. T. R., "apparent ropiness" (thread formation) in milk due to surface influence, B., 895.

Mattick, A. T. R., and Wright, N. C., influence of certain salts on the yield and composition of milk, A., 195.

Mattick, A. T. R. See also Procter, F.

Mattikow, M. See Thomas, A. V.

Mattner, O., measurement of currents of air and gases, with especial reference to a dynamic principle, B., 775.

Mattson, S. E. See Anderson, M. S.

Mattula, M. See Vlastimil.

Matusovskii, K. See Dobrjanski, A.

Matveev, V. K. See Rodionov, V. M.

Matzka, W., fermentation treatment of fruits, vegetables, etc., (P.), B., 1027. treatment of fruits, vegetables, and residues therefrom, (P.), B., 1027.

Maubert, A., effect of thorium-X on ammoniacal fermentation, A., 759.

Maude, A. H., and Westinghouse Electric and Manufacturing Co., detecting oxygen, (P.), B., 274.

Mange, sensitivity of photographic papers, B., 467.

Mangan, M., effect of fat on the tryptic digestion of protein *in vitro*, A., 1174.

Mauiwur, O. See Erben, F. X.

Maurer, E., and Diez, S., occurrence of iodine in the human and animal organism, A., 1167.

Maurer, H. See Haas, R., and Kilster, W.

Maurer, K., reactions between sugars and amino-acids. I. Synthesis of sarco-sugcoside, A., 602.

Maxine, G. See Fouassier, M.

Maxine, N. B. See Knecht, E.

Maxurin. See Aversend.

Maxus, H. See Auwers, K. ron.

Mantner, F., new synthesis of *o*-acetoveratrol [2 : 3-dimethoxyacetophenone], A., 404.

new synthesis of *o*-vanillin and *o*-veratraldehyde, A., 404.

synthesis of hydroxydivarinol, A., 516.

synthesis of iridic acid, A., 1038.

Maw, W. See Haworth, W. N.

Mawhiney, M. H., oil-burning equipment for industrial furnaces, B., 807.

Maxim, N., action of organo-magnesium compounds on some aromatic *N*-dialkyl-amides, A., 837.

dibenzylacetic [*β*-phenyl-*α*-benzylpropionic] acid and its substituted amides, A., 950.

Maxorov, B. See Zelinski, N. D.

Maxted, D. R., oxidation of tartaric acid by solutions of silver salts, A., 1025.

Maxwell, G. B., and Wheeler, R. V., firedamp explosions within closed vessels; effects of turbulence, B., 179.

Maxwell, H. L., and Hayes, A., free energy and heat of formation of iron carbide between 650° and 700°, A., 463.

Maxwell, L. C. See Bischoff, F.

Maxwell, L. R., mean free path of electrons in mercury vapour, A., 989.

Maxwell-Lefroy, H., and Graesser-Monsanto Chemical Works, Ltd., treatment of textile and other materials [wood] to protect them from attack by insects, (P.), B., 738.

Maxymowicz, W. See Brnkl, A., and Moser, L.

May, O. E. See Berliner, J. F. T.

May & Baker, Ltd. See Newbery, G., and Stickings, R. W. E.

Mayanagi, H., anomalous precipitation series, A., 1004.

Mayer, A., and Plantefol, L., influence of electrolytes in medium on gaseous exchange of mosses, A., 208.

Mayer, A. See also Jacquot, R.

Mayer, B. See Society of Chemical Industry in Basle.

Mayer, E., bleaching agent for the "bromoll" process, (P.), B., 722.

Mayer, F. See Farbw. vorm. Meister, Lucius, & Brilning, and Kickton, A.

Mayer, H., magnitude of the energy quantum in comparison with the energy liberated in chemical reactions, A., 484.

influence of chlorine on the mobility of ions in pure oxygen, A., 878.

Mayer, H. See also Siemens-Schuckertwerke Ges.m.b.H.

Mayer, K. See Fedor, A.

Mayer, L. See Schmidt, Erich.

Mayer, M. See Blumenfeld, J.

Mayer, P., biochemistry of the asymmetry problem, A., 1062.

Mayerson, H. S., Gunther, L., and Laurens, H., physiological action of darkness, daylight, and of carbon arc radiation. I. Effects of darkness on metabolism in the dog. II. Effect of carbon arc radiation on metabolism in the dog, A., 319.

Mayes, H. A., and Partington, J. R., thionyl bromide and Besson's supposed thionyl chlorobromide, A., 1219.

Mayhew, M. J. See Ramsay, R. K.

Mayo, J. K., enzymes of *Stereum purpureum*, A., 982.

May, C., variability of the titre of thiosulphate solutions, A., 814.

Maze, A. E., and Ellis-Foster Co., treating wood-tar oil, (P.), B., 85.

Mazume, T. See Kita, G.

Mazur, J., cathodic pulverisation of alloys, A., 248.

Mazza, F. P. See Berlinozzi, S.

Mazza, L., products formed during the working of lead accumulators, B., 953.

Mazzetti, C., and De Carlo, F., anhydrous borates of lithium, cadmium, lead, and manganese, A., 809.

additive compounds of ammonium perchlorate and ammonia, A., 811.

additive compounds of sulphur dioxide and benzene, A., 944.

Mazzucchelli, A., and Prò, D., densities of aqueous solutions of certain perchlorates, A., 675.

Mead, B., and General Motors Corporation, producing lead compounds [lead tetrachloride], (P.), B., 299.

Meade, R. K., Portland cement industry [during the past fifty years], B., 825*.

Meader, P. D., Robinson, G. H., and Leonard, V., pyorubrin, a red, water-soluble pigment characteristic of *Bacillus pyocyanus*, A., 1062.

Mechanical Rubber Co., hard rubber varnishes, (P.), B., 136.

Mechal, L. von. See Isler, M., and Society of Chemical Industry in Basle.

Mechlinski, P. See Leibowitz, J.

Mecke, R., electron levels of some band spectra, A., 657.

Meckenstock, H. See Benrath, A.

Mecklenburg, W., manufacture of sodium sulphate, (P.), B., 788.

Medearis, D. N. See Redfield, A. C.

Medes, G., magnesium metabolism on purified diets, A., 862.

Medovich, M. M., apparatus for treating corrosive gaseous fumes, (P.), B., 1000.

Medley, G. A., reaction between lead subacetate and phenol, B., 802.

Medvedev, S. S., catalytic oxidation of methane. II, A., 1012.

Medvedev, S. S., and Robinson, E. A., decomposition of formaldehyde by heat, A., 1010.

Mee, J. I., alloy [steel], (P.), B., 244.

Meehan, P. A., Robertson, H. M., and American Dressler Tunnel Kilns Co., tunnel kiln, (P.), B., 586.

open-fire kiln, (P.), B., 938.

Meek, W. J. See Young, A. G.

Meeker, G. H., and Oser, B. L., titrimetric double hydrogen or quinhydrone electrode systems for determination of p_m : applications to urine and blood, A., 442.

Meerscheidt-Hülliessem, J. ron, apparatus for routine testing of the stability of a smokeless powder by determining the loss in weight [at 115°], B., 933.

Meerwein, H., rate of oxidation of unsaturated compounds [terpenes] by perbenzoic acid, A., 730.

Meerwein, H. [with Ogait, A., Prang, W., and Serini, A.], rate of oxidation of unsaturated compounds by perbenzoic acid, A., 722.

Meerwein, H. See also Farbenfabr. vorm. F. Bayer & Co.

Meiss, C. E. K., colour sensitivity of photographic materials, B., 566.

fifty years of photography, B., 854*.

Meiss, H. See Zschämmel, E.

Meggers, W. F., multiplicities in the spectrum of ionised vanadium, A., 1186.

Meggers, W. F., and Kless, C. C., spectral structures for elements of the second long period, A., 651.

Meggers, W. F., and Laporte, O., arc spectrum regularities for ruthenium, A., 446.

absorption spectra of the palladium and platinum triads, A., 1193.

Meggers, W. F. See also Laporte, O.

Mehl, R. F., Whitten, J. L., and Smith, D. P., laboratory production of pure magnesia ware, A., 41*.

Mehlitz, A., formation of jellies, B., 105.

[decomposition of] pectins, B., 418.

Mehner, H., operation of reverberatory furnaces; flame furnace, (P.), B., 2*.

Mehringer, A. L. See Ross, W. H.

Mehle, R., behaviour of raffinose in the process of crystallisation of sugar B., 294.

Mehrotra, M. R., and Dhar, N. R., adsorption of acids, bases, and salts by freshly precipitated silicic acid, A., 1002.

adsorption. XV. Adsorption of ions by aluminium hydroxide and by a mixture of barium sulphate and aluminium hydroxide, A., 1091.

Mehta, M. M., lignification. I. Nature of lignin: its physiological significance and its determination in timbers. II. Histological studies on the polysaccharides and aromatic constituents of the cell wall, A., 209.

Meidinger, W., determination of silver in photographic emulsions, B., 387.

Meier, E., treatment of chrome leather waste for use in the manufacture of glue, (P.), B., 336.

Meier, H. A. See Hahn, F. L.

Meier, R., formation of methaemoglobin. VII. [Action of] nitrite, A., 314.

Meier & Weichel, production of cast iron, (P.), B., 902.

Meierling, T., and Denecke, W., three-component system iron-chromium-carbon, A., 357.

Meiersdorf, E., proteins of the ovary, A., 1167.

Meigen, W., [composition of] limestones, A., 933.

Meigs, E. B., Turner, W. A., Harding, T. S., Hartman, A. M., and Grant, F. M., calcium and phosphorus metabolism in dairy cows, A., 862.

Meiga, J. V., dehydrated carbohydrate-phenolic resinous products, (P.), B., 833.

Meigs, J. V., and Ellis-Foster Co., oxidising organic compounds [toluene to benzaldehyde], (P.), B., 77.

Meigs, Bassett & Slaughter Inc. See Bassett, H. P.

Meijer, W. See Backer, H. J.

Meiner, C. See Briner, E.

Meingast, *K.* See Consortium für Elektrochem. Ind. G.m.b.H.

Meisenburg, *K.* See Schulemann, *W.*

Meisenheimer, *J.*, constitution of Grignard's magnesium compounds. III, *A.*, 68.

pyridine, quinoline, and isoquinoline-N-oxide, *A.*, 1152.

Meisenheimer, *J.*, Casper, *J.*, Höring, *M.*, Lauter, *W.*, Lichtenstadt, *L.*, and Samuel, *W.*, optically active phosphine oxides, *A.*, 1237.

Meisenheimer, *J.*, Glawe, *H.*, Greske, *H.*, Schorning, *A.*, and Vieweg, *E.*, optically active amino oxides. IV, *A.*, 1240.

Meisenheimer, *J.*, and Senn, *O.*, acylindazoles, *A.*, 414.

Meisenheimer, *J.*, and Stotz, *E.*, dihydroquinolines, *A.*, 76.

2-methylquinoline oxide, *A.*, 77.

Meisenheimer, *J.*, Stotz, *E.*, and Bauer, *K.*, action of magnesium isobutyl and phenyl halides on quinoline methiodide, *A.*, 76.

Meisenheimer, *J.*, Zimnuermann, *P.*, and Kummer, *M.* *ron*, Beckmann transformation. VI, Configuration of oximes of benzophenone, acetophenone, and benzaldehyde, *A.*, 405.

Meiser, *W.* See Badische Anilin- & Soda-Fab.

Meisl, *A.* See Milbauer, *J.*

Meissner, *F. E.* See Butka, *H. E.*

Meissner, *K. L.*, influence of the ageing temperature on the physical and chemical properties of lautal, *B.*, 16.

effect of artificial ageing on aged aluminium alloys, *B.*, 326.

influence of ageing on the corrodibility of aluminium alloys, *B.*, 326.

Meissner, *K. L.* See also Sander, *W.*

Meissner, *K. W.*, structure of the argon spectrum, *A.*, 766.

series in the arc spectrum of argon, *A.*, 1186.

Meissner, *W.*, experimental test of the degradation of monatomic gases, *A.*, 570.

measurements by the help of liquid helium; resistance of gold, silver, zinc, cadmium, platinum, nickel, and iron down to 1-3° Abs., *A.*, 1086.

Meissner, *W.* See also Jaeger, *W.*

Meister, *W. F.*, and Stephens, *T.*, determination of water-soluble barium in black ash, *B.*, 820.

Meister, *Lucius & Brüning*. See Farbw. vorm. Meister, *Lucius & Brüning*.

Meitner, *(Fr.) L.* γ -radiation of the actinium series and evidence that the γ -radiation emission follows the disintegration of the atom, *A.*, 106.

Meitner, *(Fr.) L.*, and Freitag, *K.*, α -rays of thorium-C + C' and their behaviour in passing through various gases, *A.*, 772.

Meitner, *(Fr.) L.* See also Hahn, *O.*

Meijdel, *T.*, Ravner, *O.*, and Nørsh Hydro-Elektrisk Kvaestofaktieselskab, purifying aluminium nitrate, *(P.)*, *B.*, 439.

Meker, *G. A.*, coating metals, *(P.)*, *B.*, 884.

Melamid, *M.*, cracking of hydrocarbon oils, *(P.)*, *B.*, 622.

Melandri, *J.* and Spun Concrete Construction Co., *Ltd.*, fibre and cement composition for use as a mortar or plastic composition for walls, etc., *(P.)*, *B.*, 1016.

Melhardt, *C.*, distillation of oils, liquid fats, hydrocarbon mixtures, and similar liquids, *(P.)*, *B.*, 449.

Melanescu, *E.* See Danalla, *N.*

Meliniski, *Z. A.* See Dafert, *O.*

Melis, *B.*, industrial extraction of citric acid from lemon juice, *B.*, 690, 905*.

Mellanby, *J.*, secretion of pancreatic juice, *A.*, 858.

isolation of secretin, *A.*, 1064.

Mellanby, *J.*, and Huggett, *A. S.*, relation of secretin formation to the entrance of acid chyme into the small intestine; properties of secretin, *A.*, 436, 1279.

Mellanby, *M.*, and Killick, *E. M.*, factors influencing calcification processes in the rabbit, *A.*, 1181.

Melleneuropisk Patent Financierings-Selskab A./S., Hamburger & Co., and Lieberg, *H.*, preparation of cheese having an increased vitamin content, *(P.)*, *B.*, 460.

Mellet, *R.*, and Bischoff, *A.*, chemical reactions and columetric titrations in Wood light, *A.*, 813.

application of dyeing phenomena in the revelation of bleached written characters, *B.*, 49.

Melli, *G.* See Rona, *P.*

Mellor, *J. W.*, manufacture of pottery, etc., *(P.)*, *B.*, 667.

Mellquist, *J. H.*, applying protective layers on metals or other electric conductors, *(P.)*, *B.*, 732.

Melocle, *D. H.*, and Holley, *E.*, producing gray iron castings, *(P.)*, *B.*, 884.

casting iron in permanent molds at a regulated cooling rate, *(P.)*, *B.*, 921*.

Mulzer, *W.*, rapid determination of sulphur in coal by the method of Bahr and von der Heide, *B.*, 969.

Mäninger, *(Mile) V.* See Frenndler, *P.*

Mendel, *B.*, and Goldscheider, *J.*, colorimetric micro-method for the determination of lactic acid in blood, *A.*, 212.

Mendel, *L. B.* See Fay, *M.*, Osborne, *T. B.*, and Stedman, *H. L.*

Mendel, *W.*, manufacture of filaments and films from viscose, *(P.)*, *B.*, 436.

Mendel, *W.*, and Neidich, *S. A.*, artificial silk from viscose, *(P.)*, *B.*, 533.

Mendenhall, *C. E.*, electronic phenomena at the surface of metals, *A.*, 419.

Mendheim, *H.* See Rhenanian Verein Chem. Fabr. A.-G.

Mendler, *A. M.* See Terroine, *E. F.*

Mendoza, *M.* See British Dyestuffs Corp., *Ltd.*

Mennell, *H.*, test for mercerised cotton, *B.*, 635.

Mennie, *J. H.* See Maass, *O.*

Menon, *A. S.*, Shrivastava, *D. L.*, and Prasad, *S.*, influence of protective colloids on the size of coagulated particles, *A.*, 472.

Menon, *B. K.* See Peacock, *D. H.*

Menon, *K. N.* See Gibson, *C. S.*

Menschel, *H.*, keratin substances of human skin, *A.*, 191.

Menschikov, *G. P.* See Mazidson, *O.*, and Tschitschibabin, *A. E.*

Menschling, *H.* See Koenigs, *E.*

Mensing, *K.*, quartz [mercury vapour] lamp, *(P.)*, *B.*, 498*.

Mensing, *J.*, theory of broadening of spectral lines, *A.*, 2.

mechanics of the perturbed molecule, *A.*, 10.

rotation-oscillation bands according to quantum mechanics, *A.*, 657.

intensities of the Zeeman components in the partial Paschen-Back effect, *A.*, 1072.

Mensing, *L.*, and Pauli, *W. jun.*, dielectric constant of dipolar gases according to quantum mechanics, *A.*, 886.

Menzel, *A.* See Siegner Maschinenbau A.-G., and Vamino, *L.*

Menzel, *E.* See Hiltig, *G. F.*

Menzel, *H.*, and Kruger, *F. von*, electrometric method of p_{H_2} determination, *A.*, 374.

Menzel, *H.*, continuous working up of waste acid obtained in the purification of benzol, *(P.)*, *B.*, 627.

Menzi, *E.* See Zetzsche, *F.*

Menzies, *R. C.* See Christie, *G. H.*, and Fear, *C. M.*

Menzies, *W. C.*, coal washing, *(P.)*, *B.*, 812.

Mercer, *F. N.* See Howe, *J. L.*

Mercer, *H. N.*, method of measuring viscosity at higher temperatures, *B.*, 653.

Mercier, *M. P.* See Curie, *(Mile) I.*

Merck, *E.*, fractionating liquid mixtures, *(P.)*, *B.*, 176.

separation of liquid mixtures by distillation, *(P.)*, *B.*, 521*.

preparation of eggs, *(P.)*, *B.*, 766.

preparation of colloidal water-soluble bismuth for injection purposes, *(P.)*, *B.*, 932.

Merck, *E.*, and Diehl, *C.*, preparation of substituted aliphatic alkyl esters, *(P.)*, *B.*, 931.

Merck, *E.*, and Eichholz, *W.*, preparation of aqueous emulsions and sols, *(P.)*, *B.*, 852.

Merck, *E.*, and Krauss, *W.*, preparation of alcohols from ethers, *(P.)*, *B.*, 173.

manufacture of primary and secondary aromatic amines, *(P.)*, *B.*, 964.

Merck, *E.*, Krauss, *W.*, and Koulen, *K.*, preparation of alkyl ethers of the morphine series, *(P.)*, *B.*, 216.

Merck, *E.*, and Oberlin, *M.*, preparation of 6-nitro-3 : 4-dimethoxytoluene [α -nitrohomoveratrole], *(P.)*, *B.*, 852.

Merck, *E.*, and Roth, *K.*, preparation of complex silver salts, *(P.)*, *B.*, 771.

Merck, *E.*, Chemische Fabrik, and Dützmann, *A.*, preparation of 6-hydroxy-A-methyloxindole and [p-hydroxyphenylmethylglycine], *(P.)*, *B.*, 434.

preparation of pure α -sparteine methiodide, *(P.)*, *B.*, 404.

Merck, *E.*, Chemische Fabrik, Dützmann, *A.*, and Krauss, *W.*, preparation of methylaminooacetylpiperacetyl dibenzyl ether, *(P.)*, *B.*, 772.

Merck, *E.*, Chemische Fabrik, and Krauss, *W.*, preparation of codeinone, *(P.)*, *B.*, 386.

Merck, *E.*, Chemische Fabrik, and Oberlin, *M.*, preparation of 2-nitro-3 : 4-dimethoxy-1-methylbenzene [α -nitrohomoveratrole], *(P.)*, *B.*, 28.

Merck, *F.* See Ryschkewitsch, *E.*

Meredith, *W.*, and Petroleum Rectifying Co., dehydrating [oil] emulsions by externally-charged particles, *(P.)*, *B.*, 85.

Merejkowski, *B. K.*, theory of catalytic phenomena, *A.*, 364.

Merejkowski, *B. K.* See also Schestakow, *P.*

Mergenthaler, *F.* See Schlubach, *H. H.*

Merica, *P. D.*, and International Nickel Co., nickel alloy, *(P.)*, *B.*, 303.

Merica, *P. D.*, and Waltenberg, *R. G.*, malleability and metallography of nickel, *B.*, 366.

Merka, *A.* See Rollett, *A.*

Merkel, *P.* See Chem. Fabr. Griesheim-Elektron.

Merkel, *P.* See Kotz, *A.*

Merrill, *H. B.* See Wilson, *J. A.*

Merriman, *T.*, lime-silica index as measure of cement quality, *B.*, 543.

Merris, *M. H.*, and Nichols Copper Co., conversion of cuprous materials, *(P.)*, *B.*, 444.

Merritt, *E.*, contact rectification by metallic germanium, *A.*, 115.

form of the absorption bands in solutions of the organic dyes, and a relation between absorption and fluorescence, *A.*, 1193.

Merritt, *G. E.*, thermal expansion of some fused oxides used as refractories, *B.*, 917.

Merritt, *G. E.*, and Peters, *C. U.*, interferometer measurements of the thermal dilatation of glazed ware, *B.*, 878.

Merritt, *L. M.*, laboratory muffle kiln [for testing ceramic products], *B.*, 632.

Merryman, *W. W.*, variation with pressure of the residual ionisation in gases, *A.*, 772.

Merson, *R. D.*, [removing air bubbles from electrodes of] electrolytic apparatus, *(P.)*, *B.*, 371.

Merten, *W. J.*, case-hardening, *(P.)*, *B.*, 329.

irregular carburisation of iron and iron alloys; cause and prevention, *B.*, 982.

Merten, *E.* See Schumann, *O.*

Mertens, *M.* See Ostwald, *Wolfgang*.

Merton, *T. R.*, reversal in vacuum tube spectra, *A.*, 1185.

Merwe, *C. R. van der*, infertility of the subsoil, *B.*, 990.

Merwe, *C. R. van der*. See also Marchand, *H. de C.*

Merz, *W.*, action of mercuric acetate on cholesterol, *A.*, 723.

Merz & McLellan, and Riley, *W. A.*, fuel distillation, *(P.)*, *B.*, 429.

Merz & McLellan, and Weeks, *E. G.*, retorts [for carbonising], *(P.)*, *B.*, 262.

fuel-distilling apparatus; distillation of solid fuels and other substances, *(P.)*, *B.*, 572.

Merz & McLellan. See also Weeks, *E. G.*

Merzbacher, *S.* See Deutsche Gasglühlicht-Auer-Ges.

Messe, *W.* See Müller, *Erich*.

Messenger, *O. G.*, and Standard Development Co., process of making carbon black, *(P.)*, *B.*, 450.

Messerle, *F.*, utilisation of cellulose in the intestine after oral administration of a cellulose-splitting enzyme, *A.*, 801.

Messerle, *N.*, cholesterol content of the tissues of pigeons suffering from cyanide poisoning and vitamin-B deficiency, *A.*, 98.

Messner, *J.*, separation of the cinchona alkaloids, *B.*, 384.

Mestan, *F.*, colorimeters based on Ostwald's theory, *B.*, 929.

determination of the colour of wort and beer by colorimeter constructed according to Ostwald's theory, *B.*, 962.

Mestrezat, *W.*, urinary nitrogen not determined by the Kjeldahl method, *A.*, 858.

Mestrezat, *W.*, urinary nitrogen titratable by the Kjeldahl-Forster, Kjeldahl-Deniges, and Kjeldahl-Grigaut methods, *A.*, 704.

Metal Research Corporation, reduction of alumina, *(P.)*, *B.*, 711*.

Metal Research Corporation. See also Strong, *W. E. S.*

Metal & Thermit Corporation, and Schwartz, *K. W.*, lead-in wires for electric lamps and the like, *(P.)*, *B.*, 757.

Metal & Thermit Corporation. See also Lienhardt, *W. S.*, Little, *W. T.*, and Lubowsky, *S. J.*

Metalbank & Metallurgische Gesellschaft, Akt.-Ges., electrical [blast-furnace] gas purification, *(P.)*, *B.*, 147.

[means for jarring collecting electrodes in] electrical precipitation apparatus, *(P.)*, *B.*, 224*.

preparation of sulphuric acid of high concentration, *(P.)*, *B.*, 236.

utilisation of gases from cellulose digesters, *(P.)*, *B.*, 401.

forming a protective coating on metals, *(P.)*, *B.*, 412.

recovery of zinc from fine ores or other material containing it, *(P.)*, *B.*, 412.

apparatus for continuously cleaning insulators used in electrical gas cleaning and dust-precipitating installations, *(P.)*, *B.*, 551.

production of sulphuric acid from sulphur-dioxide-containing-gases, *(P.)*, *B.*, 631*.

apparatus for roasting or sintering ores, etc., *(P.)*, *B.*, 674.

Metallbank & Metallurgische Gesellschaft, Akt.-Ges., leading-in means, particularly for high-tension currents [in electrical gas purifying apparatus], (P.), B., 712.*
 apparatus for roasting, sintering, and otherwise treating fuel-containing ore by means of the Dwight and Lloyd process, (P.), B., 751.
 production of highly concentrated commercial sulphuric acid, (P.), B., 787.
 manufacture of sulphuric acid, (P.), B., 821, 1012.
 complete elimination of zinc from zinciferous ores and the like, especially zinciferous purple ores or calcined residues, (P.), B., 833*.
 drying and low-temperature distillation of fuel by internal heating, (P.), B., 971.

Metallbank & Metallurgische Gesellschaft, Akt.-Ges., and Gersecke, W., purifying oils and fats under a high vacuum by means of steam or the like, (P.), B., 66.

Metallbank & Metallurgische Gesellschaft, Akt.-Ges., Girzewald, C. von, and Weidmann, H., production of pure lithium compounds from minerals containing lithium, especially from lithium mica, (P.), B., 13.

Metallbank & Metallurgische Gesellschaft, Akt.-Ges., and Klencke, H., manufacture of sulphuric acid, (P.), B., 319.

Metallbank & Metallurgische Gesellschaft, Akt.-Ges., and Kurz, O., removing arsenic from burner gases, (P.), B., 320.

Metallbank & Metallurgische Gesellschaft, Akt.-Ges., and Weidmann, H., recovery of lithium carbonate from residual liquors containing potassium sulphate, (P.), B., 876.

Metallisation, Ltd., and Ballard, W. E., protecting metallic articles from oxidation, deterioration, or corrosion, (P.), B., 984.

Metallchemische Werke Rödeleben A.-G., production of tin free from lead from leady tin ores; treatment of fine dust containing lead, zinc, and tin, (P.), B., 756.

Metall-Verarbeitungsges. m.b.H., alloy for soldering lead alloys to iron, bronze, and the like, (P.), B., 331.

Metals Disintegrating Co. See Hall, E. J.

Metals Extraction Corporation, Ltd. See Field, S.

Metals Production Co. of North America. See Perkins, W. G.

Metals Production, Ltd. See Moulden, J. C.

Metals Protection Corporation. See Humphries, C. H.

Metals Recovery Co. See Terry, J. T., jun.

Metals Refining Corporation. See Lapsley, H. G.

Metals Research Corporation. See Parsons, C. E.

Metcalf, N. W. See Holmes, H. N.

Metropolitan-Vickers Electrical Co., Ltd., and Hill, L. H., devices for the chemical treatment of gases, (P.), B., 416.

Metropolitan-Vickers Electrical Co., Ltd. See also Bailey, R. W., Brown, W. J., Burch, C. R., and Oillard, E. A.

Metta, N., analysis of gases from rocks by microchemical methods, A., 813.

Metz, E. See Braun, J. von.

Metz, G. P., and Metz Laboratories, Inc., H. A., detoxifying compound, (P.), B., 609.

Metz, L. See Wöhler, L.

Metz Laboratories, Inc., H. A. See Hooper, C. W., and Metz, G. P.

Metzger, A. See Rupe, H.

Metzger, F. J., [manufacture of solid] calcium cyanide, B., 972.

Metzger, F. J., and Air Reduction Co., production of oxygen-free nitrogen, (P.), B., 708.

Metzger, F. J., and California Cyanide Co., Inc., method of making calcium cyanide, (P.), B., 486.

production of alkali cyanides, (P.), B., 713.

Metzger, H. See Müller, Ernst.

Meuulen, H. ter, simple heating apparatus, A., 261.

determination of arsenic in organic compounds, A., 490.

determination of mercury as metal in its organic and inorganic compounds, A., 492.

Meuulen, J. H. van der, vulcanising fat substances, (P.), B., 137*.

Meuulen, P. A. van der. See Smith, L. B.

Meuendlycke, C. H. See Huse, E.

Meunier, F., overvoltage, A., 130.

Meunier, F., and De Brisson de Laroche, C., decomposition of peat, (P.), B., 476.

Meunier, J., spectrographic detection and determination of strontium using a hydrogen flame, A., 703.

Meunier, J. See also Desgrez, A.

Meunier, L., and Chambard, P., preparation of isoelectric collagen for tannin assay, B., 798.

Meunier, L., Chambard, P., and Jamet, A., preparation of hide powder for [tannin] analysis, B., 167.

Meunier, L., and Jamet, A., industrial determination of tannin, B., 556.

fluorescence of sulphite-cellulose extracts and its applications, B., 798.

fluorescence of the acetone extract of tanning materials, B., 798.

Meunier, L., and Rey, G., effect of ultra-violet light on wool, B., 971.

Meurice, R., volumetric determination of potassium as hydrogen tartate, A., 702.

detection of cadmium in the presence of copper, A., 703.

Meuwissen, J. C. See Böeseken, J.

Mevius, W., direct effect upon plant cells of the hydrogen-ion concentration of the nutrient medium, B., 1025.

Mewes, R. C. E., liquefaction and separation of gaseous mixtures, (P.), B., 936, 968.

Mewes, R. F., and **M**ewes, R. K. E., separating gas mixtures, more especially air or other difficultly liquefiable gas mixture, (P.), B., 823.

Mewes, R. F. See also Feno-Ges. für Energieverwertung.

Mewes, R. K. E. See Mewes, R. F.

Mexco, Ltd. See Scott, A. C.

Meyden, H. van der. See Rossem, A. van.

Meyer, A., some relations between climate and soils in Europe, B., 684.

Meyer, Andr., catalytic rôle of mercury in sulphonation of anthraquinone, A., 1146.

Meyer, D., influence of [seed treatment with] magnesium chloride and mercury-containing materials on plant yield, B., 416.

Meyer, Eberhard, and Claesen, W., preparation of solid camphene free from chlorine, from pinene hydrochloride, (P.), B., 216.

Meyer, Eberhard. See also Garke, R.

Meyer, Erich, dissociation of hydrogen molecules by mercury atoms in the metastable state 2^3P_0 , A., 777.

Meyer, Erich. See also Wintgen, R.

Meyer, E. E. A. G., and Morgan & Wright, rubber compound and its process of manufacture, (P.), B., 22.

Meyer, E. E. A. G. See also Morgan & Wright.

Meyer, F., cracking petroleum by the Dubbs process, B., 932.

Meyer, G. J. See Levene, P. A.

Meyer, H., and Nehl, F., mechanism of plastic deformation [of metals], B., 95.

Meyer, H. (Hamburg). See Goos, F.

Meyer, Hans. See Benary, E.

Meyer, H. E., iodine partition in the thyroid, A., 969.

Meyer, H. H. See Tannmann, G.

Meyer, J. See Sartory, A.

Meyer, Julius, and Gröhler, K., polyhydro-sulphates and -selenates, A., 925.

Meyer, Julius, and Gubins, W., hydroxynitrosylselenic acid, A., 488.

autoxidation of manganese hydroxide, A., 925.

Meyer, Julius, and Pawletta, A., detection of vanadic acid by means of hydrogen peroxide, A., 1020.

constitution of the so-called pervanadic acid, A., 1218.

Meyer, J. F., manufacture of non-alcoholic beer, etc., (P.), B., 800.

Meyer, J. F., and Lücker, H., production of practically alcohol-free beverages, (P.), B., 140*.

Meyer, K. See Posner, T.

Meyer, K. H., physics and chemistry of the dyeing process, B., 316.

Meyer, K. H., and Fikentscher, H., physics and chemistry of dyeing processes. II. Dyeing wool with acid dyes, B., 740.

Meyer, K. H., Schuster, C., and Bülow, W., physics and chemistry of dyeing processes. II. Dyeing of non-dinitrated nitrocellulose silk, B., 183.

Meyer, K. H. See also Badische Anilin- & Soda-Fab., and I. G. Farbenind. A.-G.

Meyer, L. See Meyer, M., and Wrangell, M. von.

Meyer, L. F., and Nassau, E., vitamin content of human milk, A., 1064.

Meyer, M., and Meyer, L., and Hüttenwerke Tempelhof A. Meyer, dissociating [separating the constituents of bearing-] metal alloys, (P.), B., 884.

Meyer, T. See Hemmelmeyer, F.

Meyer, W. A. See Naamli, Vennoots. Algem. Chem. Produktenhandel.

Meyer-Bisch, R. See Heubner, W.

Meyerhofer, O., influence of oxygen on alcoholic fermentation by yeast, A., 95.

Meyerhofer, O., and Lohmann, K., muscle fatigue, A., 427.

respiration and carbohydrate exchange of animal tissues. I. Formation of lactic acid in, and its disappearance from, animal tissues, A., 753.

respiration and carbohydrate exchange of animal tissues. III. Difference of α - and β -lactic acids in regard to respiration and carbohydrate synthesis in the organism, A., 751.

Meyerhofer, A. F., producing soluble carbonates and hydrates [hydroxides], (P.), B., 126.

production of barium peroxide, (P.), B., 639, 666.

producing metal compounds, (P.), B., 1013.

Meyerhofer, A. F., and De Haen, E. A.-G., producing soluble carbonates or hydroxides from insoluble carbonates, oxides, or hydroxides, (P.), B., 12.

Meyers, C. H. See Gilman, H., and Olson, A. R.

Meyers, H. H., and Armour Fertilizer Works, production of available phosphate, (P.), B., 507.

Meynardie, P. J. de St. Andre, apparatus for concentrating and cooling aqueous liquids and producing therefrom crystals of ice or other substances, (P.), B., 31.

Meyssan, blackening and burnishing iron, B., 1016.

Mezzadri, G., sugar-inverting bacteria and their industrial application for the preparation of fatty acids, especially lactic, acetic, and butyric acids, and also acetone, ethyl and butyl alcohols, and mannitol, B., 210.

Michael, A. See Farbw. vorm. Meister, Lucius, & Brüning.

Michael, S. See Falck, R.

Michael, W. See Badische Anilin- & Soda-Fab.

Michael & Co., J. See Jahl, A.

Michaelis, L., law of mass action and the kinetics of the action of invertase, A., 542.

Michaelis, L., and Dokan, S., electric properties and ionic permeability of membranes. VI. Membranes of paraffin, wax, mastic, and rubber, A., 120.

Michaelis, L., and Fujita, A., electrical properties and ionic permeability of membranes. IV. Potential differences and permeability of collodion membranes, A., 120.

electrical properties and ionic permeability of membranes. VII. Permeability of the collodion membrane to multivalent cations, A., 349.

Michaelis, L., and Hayashi, K., electrical properties and ionic permeability of membranes. IX. Dried collodion membranes, A., 901.

Michaelis, L., and Kawai, S., activity of sodium in serum, A., 192.

Michaoux, H. See Randoin, L.

Michael, F., and Hess, K., cellulose. XXI. Relation of β -D-glucuronic acid to the constitution of cellulose; the movement of oxygen-bridges in carbohydrates, A., 1230.

Michel, G., casting of magnesium and its alloys, (P.), B., 755.

Michel, G., and Spanner, H. J., cooling effect on oxide cathodes, A., 218.

Michel, M., production of photographic image in colours on fabric, (P.), B., 122.

Michel, O. See Sunder, C.

Michel-Durand, effect of light on tannin formation, A., 208.

physiological rôle of tannins, A., 981.

solvents for tannins, B., 415.

Michelman, J., obtaining pyrrole, pyrrole derivatives, and pyrrole from animal waste, (P.), B., 163.

Michel, M., solution for sensitising paper, glass, fabric, etc., (P.), B., 77.

Michetti, A. See Vecchiotti, L.

Michie, A. C. See Davidson, W. B.

Michlin, D., perhydride of the colostrum and milk of the cow, A., 433.

Michlin, D. See also Sharsky, R.

Middleboe, K., and Smith & Co., F. L., grinding mill, (P.), B., 650*.

Middleton, A. R., reaction of "aluminum" with hydroxides of beryllium, rare earths, zirconium, and thorium, A., 930.

Middleton, G. N. See Stuart, A. T.

Middlety, T. jun., and General Motors Corporation, method and means for using motor fuels, (P.), B., 779.

Middlety, T. jun., and General Motors Corporation, method and means for using low-compression fuels [in internal-combustion engines], (P.), B., 396.

[motor] fuel, (P.), B., 130, 779.

[composition for] prevention of fuel knock, (P.), B., 521.

treating motor fuels, (P.), B., 779.

Midland Coal Products, Ltd., and Ingman, C., manufacturing smokeless briquetted fuel from small coal, (P.), B., 37.

Mieg, W., Raeder, H., and Grasselli Dyestuff Corporation, sulphonated [hydr]oxy-dianthraquinonylamine dyestuffs, (P.), B., 233.

Mieg, W. See also I. G. Farbenind. A.-G.

Miekeley, A. See Bergmann, M.

Mielke, H., oxidative enzymes of the leucocytes, A., 536.

Miethe, A., and Stammreich, H., distillation of amalgams, A., 119. formation of gold from mercury in an interrupted arc, A., 367. distillation of mercury containing gold, A., 493.

Miettling, K. See Masing, G.

Mihalovics, G. See Csapo, J.

Mil, T., and Isomura, K., process of manufacturing oil of a low boiling point from mineral heavy oils, (P.), B., 701.

Mijer, P. See Two-Tone Corporation.

Mika, C. See Strache, H.

Mika, J., microscopic examination of borax beads, A., 1116.

Mikeska, L. A. See Lovene, P. A.

Mikumo, J., naphthol soap, B., 286.

Milaan, J. B. van, intensity measurements in the iron spectrum, A., 102, 986.

Milas, N. A. See Terry, E. M.

Milbauer, J., and Lauschmann, J., influence of desensitisers on the coloured tints of photographic papers, B., 300.

Milbauer, J., Pick, L., Vogel, O., Meisl, A., Chloupok, J., Slemr, B., and Judenč, V., manufacture of manganese sulphate, sodium nitrite, lead dichromate, and antimony salts, B., 787.

Milbauer, J., and Tuček, J., reaction $R_mSn + 2nSO_3 = R_m(SO_4)_n + nS_2$; chemistry of the roasting of some ores, B., 495.

Miles, F. D., and Nobel's Explosives Co., Ltd., [lamp] wicks, (P.), B., 436.

Miles, H. D., and Buffalo Foundry and Machine Co., evaporator, (P.), B., 81. vacuum drying [evaporating] apparatus, (P.), B., 113.

Miles, T. V., Allott, G. W., and Newton Chambers & Co., Ltd., purification of coal gns, (P.), B., 621.

Miles, W. J., jun., process of making malleable iron castings, (P.), B., 132.

Miliotis, J. See Blaise, E. E.

Milk Oil Corporation, processes of making butter, (P.), B., 26. recovering oil or fat from milk and cream, (P.), B., 106*, 339*.

Milk Oil Corporation, and North, C. E., processes of making butter substitutes, (P.), B., 383*.

Milk Oil Corporation. See also North, C. E.

Milkal, Ltd., and Sierra, J. M., spray drying apparatus for manufacturing milk or like powder, (P.), B., 297.

Millar, H. E. See Withey, W. H.

Millar, W. S., desulphurisation and concentration of sulphide iron ores (P.), B., 134*, 329.

Miller, A., metallic composition [lead amalgam], (P.), B., 496, 677*.

Miller, C., rotary drying apparatus, (P.), B., 521.

Miller, C. D., vitamins (A, B, and C) of papaya, A., 871.

Miller, C. N., waterproof Portland cement, (P.), B., 193.

Miller, E. See Dohme, A. R. L.

Miller, E. B., and Silica Gel Corporation, separating or recovering a gas from a mixture of gases, (P.), B., 473*.

Miller, E. J., adsorption from solution by ash-free adsorbent charcoals. I. Purification of adsorbent charcoals, A., 898. adsorption from solution by ash-free adsorbent charcoals. II. Properties of purified adsorbent charcoals, A., 1090.

Miller, E. R., and Hunt, J. R., volatile oil of *Collinsonia anisata*, B., 961.

Miller, E. R. See also Salmon, W. D.

Miller, F. W. See Hill, A. E.

Miller, G. E., preparation of hexachloroethane by the chlorination of ethylene, A., 43*.

Miller, H. G., potassium in animal nutrition. III. Influence of potassium on excretion of sodium, chlorine, calcium, and phosphorus, A., 429. potassium in animal nutrition. IV. Potassium requirements for normal growth and maintenance. V. Influence of potassium on excretion of sodium, chlorine, calcium, and phosphorus, A., 1273.

Miller, J. S., jun., and Barber Asphalt Co., treatment of oils and hydrocarbons [production of blown oil asphalts], (P.), B., 655.

Miller, L. B., clarification of coloured waters, B., 29. properties of iron compounds and their relation to water clarification, B., 29.

Miller, L. B., and British Thomson-Houston Co., Ltd., preparing quartz rods or canes, (P.), B., 128.

Miller, L. B., and General Electric Co., Ltd., silica glass, (P.), B., 14*.

Miller, M. F., Bradfield, R., and Dudley, F. L., soil studies at the Missouri station, B., 799.

Miller, P. F. See Aktiebolaget Separator.

Miller, R. C., calcium and phosphorus balances with dairy cattle, A., 862.

Miller, W. B., and Perkin, A. G., reduction products of the hydroxyanthraquinones, VII, A., 174.

Milligan, L. H., spiral gas-washing bottle, A., 707.

Millikan, R. A., high-frequency rays of cosmic origin, A., 450.

Millikan, R. A., and Eyring, C. F., laws governing the pulling of electrons out of metals by intense electrical fields, A., 219.

Millikan, R. A. See also Bowen, I. S.

Millington, W. E. W., and Thompson, F. C., plastic deformation of single metallic crystals, A., 666, 1085.

Millett, J. O'N. See Pridgeaux, E. B. R.

Mills, C. A., sterilising protein or other colloidal material (P.), B., 28.

Mills, D. G., action of sulphate water on concrete, B., 825.

Mills, L. D., and Crowe, T. B., recovering cyanogen from solutions, (P.), B., 17. process and apparatus for precipitating and filtering, (P.), B., 112.

Mills, W. G., and Packards & James Fison (Thetford), Ltd., lead chambers employed in the manufacture of sulphuric acid, (P.), B., 359.

Mills, W. H., and Akers, A. T., dibenzyl-2-methylquinoline, A., 77.

Mills, W. H., and Bains, L., symmetrical substitution derivatives of trimethylene dibromide and pentamethylene dibromide, A., 44.

Mills, W. H., and Raper, R., cyanine dyes. IX. Mechanism of the condensation of 2-methylquinolinium alkylidides in presence of bases, A., 77. resolution of an asymmetric arsenic compound into its optically active form, A., 186.

Mills, W. H., and Warren, E. H., configuration of the ammonium ion, A., 178.

Milne, E. A., equilibrium of the calcium chromosphere, A., 105.

Milner, R. T. See Parr, S. W.

Milobedzki, T., and Jajte, S., use of extracts of blue cabbage as an indicator, A., 927.

Milobedzki, T., and Kilitowska, J. H., action of menthol on the chlorides of phosphorus, A., 730.

Milroy, T. H. See Beattie, F.

Minaev, B., increase in alkalinity of sugar solutions on evaporation, B., 814.

Minaki, T. See Atsuki, K.

Mindalev, L., reaction of cobalt, A., 261.

Mine Safety Appliances Co. See Mase, R. P.

Minerals Separation, Ltd., Keller, C. H., and Lewis, C. P., concentration of ores by froth-flotation, (P.), B., 18.

Minerals Separation, Ltd., and Moulden, J. C., concentration of ores containing metals of the platinum group, (P.), B., 952.

Minerals Separation, Ltd. See also Tucker, S., and Wood, L. A.

Minerals Separation North American Corporation, froth-flotation apparatus, (P.), B., 675*.

Minerals Separation North American Corporation. See also Broadbridge, W., Elder, E., Lewis, C. P., Qnigley, J. T., and Truran, W.

Mines, H. M., phosphorescent or luminous masses, (P.), B., 218.

Minet. See Richet, C., jun.

Mingoia, Q., inorganic magnesyl compounds, A., 388. pyrrole and indole syntheses with [substances containing] anthracene nuclei, A., 1158.

Minkowski, R., natural width of spectral lines and widening due to pressure, A., 650.

Minnesota Mining and Manufacturing Co., and Okie, F. G., manufacture of sand paper or like composite structures, (P.), B., 661.

Minnich, W. See Society of Chemical Industry in Basle.

Minsaas, J. See Rieber, C. N.

Minter, M. M., drying apparatus, (P.), B., 808.

Miravalle, R., and Moles, E., physico-chemical properties of hydrogen iodide, A., 310.

Miravalle, R. See also Moles, E.

Mirchandani, T. J. See Sudborough, J. J.

Miriam, S. R. See Novello, N. J.

Mirlesse, L., gasification of heavy hydrocarbons [for internal-combustion engines], (P.), B., 1006*.

Mirlees Watson Co., Ltd., and Dexter, W. A., surface condensers, (P.), B., 696*.

Mirsky, A. E. See Anson, M. J.

Misaid, K., partial bromination of phloridzin. I. and II. Bromophlorin and bromo-p-hydroxyphenylpropionic acid, cleavage products of dibromo-phloridzin, A., 501. partial bromination of phloridzin. III, A., 863.

Miscall, J. See Rice, F. E.

Miscampbell, H., lime-kiln, (P.), B., 320. apparatus for hydrating lime, (P.), B., 916.

Misch, O., production of rich gns by the aid of water-gas, (P.), B., 573.

Mischke, E. See Moldenhauer, W.

Mishima, T. See Nagaoaka, H.

Mislowitzer, E., electrometric titration in physiological fluids. III. Blood-sugar method, A., 412.

Mislowitzer, E., and Schaefer, W., electrometric titration in physiological fluids. II. Determination of iron, A., 443.

Mislowitzer, E. See also Rona, P.

Misbach, E. C., process of making alkali xanthates, (P.), B., 743.

Mississippi Glass Co., annealing glass, (P.), B., 790*.

Missy, J., dyeing hanks, (P.), B., 663.

Misumi, K., influence of injections of neutral, acid, and alkaline salt solutions on urine secretion, A., 1168. influence of calcium and magnesium chloride injections on urine secretion, A., 1169.

Mitchell, A. C. G. See Hicks, H. C.

Mitchell, A. D., reaction between hydroxylamine and ferric chloride, A., 580.

Mitchell, C. A., colour reaction of saponin with nitrates, B., 438.

Mitchell, C. W. See Sayers, R. R.

Mitchell, E. A. See Lovatt, A. E.

Mitchell, F. M. See Lovatt, A. E.

Mitchell, H. H., and Carman, G. G., does addition of sodium chloride increase the value of a maize diet for growing animals? A., 754. biological value of nitrogen of mixtures of white flour and animal foods, A., 754.

Mitchell, H. S., and Schmidt, L., relation of iron to nutritional anaemia, A., 1269.

Mitchell, J., and Mitchell, W. B., laboratory [electric] furnace for high temperatures, (P.), B., 445*.

Mitchell, J. E. H. See Holroyd, G. W. F.

Mitchell, J. L., lithopone product, (P.), B., 100*.

Mitchell, L. C., and Alford, S., analysis of butter, B., 605.

Mitchell, L. C. See also Smith, E. R.

Mitchell, S., method for determining solubility of sparingly soluble substances, A., 787.

Mitchell, T. A., and Tsabe, K., making [lead] arsenates, (P.), B., 156.

Mitchell, T. C. See Caven, R. M.

Mitchell, W. B. See Mitchell, J.

Mitiae, W. K., influence of a constant magnetic field on the magnetic spectrum, A., 1086.

Mitra, S. K., and Phukan, L. N., wood ashes as an ameliorant of soil acidity, B., 1024.

Mitscherlich, E. A., determination of manurial requirements of soils by Mitscherlich's method, B., 70.

Mitscherlich, E. A., heats of fusion of organic solvents of relatively low m. p., A., 568.

Mitsukuri, S., and Aoki, S., [latent] heats of fusion of chloroform, acetone, and carbon disulphide, A., 668.

Mitsukuri, S., and Hara, K., heats of fusion of ethyl ether, methyl alcohol, and ethyl alcohol, A., 785.

Mitsukuri, S., and Nakatsuchi, A., fusion curves and physical properties of the system benzene-toluene, A., 556, 671*.

Mitsukuri, S. See also Freundlich, H., and Sinozaki, H.

Mittag, C. See Krupp, F., Grusonwerk A.-G.

Mittasch, A., catalysis, A., 250.

Mittasch, A. See also Badische Anilin- & Soda-Fabrik, and I. G. Farbenind. A.-G.

Miyake, K., and Adachi, M., influence of fertilising ingredients on the hydrogen-ion concentration of the juice of the rice plant, A., 1065.

Miyake, S. See Cohen, E.

Miyamichi, E. See Karrer, P.

Miyamoto, S., reducing action of ferrous hydroxide, A., 133*.

transference of active states and the mechanism of catalytic action, A., 915.

Miyaniishi, M., reversing action of red and infra-red rays on sensitised and fogged photographic plates and the absorption of the sensitising dyestuffs, B., 1029.

Miyoshi, T. See Chikashige, M.

Mizushima, S., anomalous dispersion and absorption of electric waves. I., II., and III., A., 560, 778, 836.

anomalous dispersion and absorption of electric waves. IV. and V. Anomalous dispersion and Debye's dipole theory, A., 1082.

Mizutani, M., ionisation of weak electrolytes in water-alcohol solutions. III. Relations between the chemical constitution and alcohol-sensitivity of dibasic acids in ethyl alcohol, A., 125.

ionisation of weak electrolytes in water-alcohol solutions. IV. Ionisation in methyl alcohol solutions, A., 126.

Mladejovsky, V., producing a preparation for treating arteriosclerosis, (P.), B., 466*.

Mlodziejowski, A., phase diagrams of [binary] alloys where chemical combination occurs, A., 25.

Moburg, F. O. See Hedenburg, O. F., and Seil, G. E.

Moche, N. L. See Lynch, T. D.

Modern, F. See Wernicke, R.

Möhring, A., double refraction of natural cellulose fibres and of chitin, A., 1082.

gels with anomalous accidental double refraction, A., 1098.

Moeller, J. F. L., treatment of waste paper and the like in the preparation of paper pulp, (P.), B., 976.

Moeller, M., and Siemens & Halske Akt.-Ges., apparatus for continuously measuring the combustible constituents of waste gases, (P.), B., 39.

Möller-Arnold, E., determination and control of the potassium and phosphorus content of the soil in practice, B., 24.

field experiment on the effect of an acid soil reaction on different [systems of] manuring, B., 959.

Moetsch, J. C. See Raiziss, G. W.

Mohler, F. L., relative production of negative and positive ions by electron collisions, A., 4.

photo-ionisation of a gas by a discharge in the same gas, A., 877.

excitation potentials of the spectra of argon II and neon II, A., 988.

photo-ionisation experiment with hydrogen, A., 993.

Mohler, F. L., Foote, P. D., and Chenaud, R. L., photo-ionisation and relative absorption probabilities of cesium vapour, A., 217.

Mohler, F. L. See also Ellett, A., and Rmark, A. E.

Mohler, H., reactions between solutions of benzoin and of aromatic aldehydes in pyridine and metallic copper, A., 71.

Mohlman, F. W., treatment of packing house, tannery, and corn products wastes, B., 998.

Mohr, H. W. See Campbell, E. D.

Mohr, R., bleaching textiles by means of oxygen or ozone baths, (P.), B., 403.

from "hot-bleach" to "cold-bleach"; [development of the Mohr process of bleaching], B., 534.

Mohrschulz, W., preparation of glyoxylic acid from oxalic acid, A., 1110.

Moir, J., colour and chemical constitution. XX., A., 403.

Mokruschlin, S., molecular diameters at the b. p. A., 780.

Mokruschlin, S., and Esslin, O. A., electric adsorption, A., 573.

Moldavsky, B. L., Inositol in pepsin, A., 641.

Moldenhauer, W., electrolytic determination of copper in the presence of bismuth, A., 592.

electrolytic determination of nickel in nickel steel, B., 588.

Moldenhauer, W., and Dörsam, H., union of phosphorus and nitrogen under the influence of electric discharges, A., 696.

Moldenhauer, W., and Mishke, E., reduction of ferric salts with hydrogen sulphide, A., 691.

Moldenke, R., and Schumacher, W., making aluminium sulphate from aluminous materials, (P.), B., 127*.

Moles, E., molecular volume of water in crystalline hydrates, A., 336.

changes in volume in the formation of inorganic compounds, A., 559.

limits of accuracy of physico-chemical methods for the determination of atomic weight, A., 664.

additive rule for the molecular volumes of crystallised inorganic compounds, A., 778.

Moles, E., and Miravalles, R., preparation and determination of the weight of a normal litre of hydrogen iodide, A., 999.

Moles, E., and Villamil, C. D., thermal decomposition of calcium oxalate. II. Thermochemistry and kinetics of the reaction, A., 1210.

Moles, E. See also Crespi, M., and Miravalles, R.

Molesworth, H. B. See Heskett, W. P.

Molin, T. N. M., replacing a heavy or cold liquid containing cellulose, peat, or the like, in suspension, by a light or hot liquid, (P.), B., 315.

Molingen, E., and Gaye, J., apparatus for acidulating textile and other material, (P.), B., 914*.

Molitor, H., ammonium sulphate and sodium sulphate from sodium bisulphite and ammonia, B., 664.

Mollang, J. See Müller, Robert.

Molony, S. B., and Vanderbilt Co., R. T., rubber vulcanisation, (P.), B., 23.

Molthan, W., dependence of the vacuum obtainable by means of a diffusion pump on the purity of the mercury vapour, A., 1088.

Mommsen, H., influence of hydrogen-ion concentration on the velocity of dialysis, A., 240.

influence of p_{H} on the diffusion of dyes into gelatin gels, A., 354.

Mond, A. L., burner apparatus for combustion of liquid, gaseous, or pulverised fuels, (P.), B., 655*.

Mond, R., haemolysis. I. Mechanism of haemolysis by hydrogen ions and hydroxyl ions, A., 316.

haemolysis. II. Effect of salts and haemolysis by saponin, A., 856.

Mond, R., and Netter, H., so-called anion-deficit in blood-serum; determination of the dissociation constant and concentration of an unknown acid present in serum, A., 192.

Mondain-Monval, P., thermal properties of viscous sulphur, A., 127.

law concerning the "ratio of tangents" to solubility curves, A., 238.

thermal properties of different forms of selenium, A., 800.

calorimetric researches on sulphur and selenium, A., 1197.

Mondain-Monval, P. See also Samsoen, M.

Mongereau, P. M. See Charton, E.

Monier-Williams, G. W., "blowing" of canned fruit due to chemical action, B., 801.

Monk, G. S., secondary standards of wave-length in the spectra of neon and iron, A., 650, 1185.

Monk, R. H., and Trail, R. J., electrolytic iron from ilmenite ores, B., 670.

Monnier, J. B., fuel feeding arrangement for tunnel furnaces, (P.), B., 275*.

Montagne, M., action of organo-magnesium compounds on aliphatic dialkyl-amides, A., 942.

Montagne, P. See Jolibois, P.

"Montecatini," Soc. Gen. per l'Ind. Min. ed Agric., and Fauser, G., apparatus for the production of synthetic ammonia, (P.), B., 979.

Montemartini, C., and Losana, L., action of mixtures of oxygen and nitrogen on a few elements, A., 1216.

Monterunici, R., production of magnesium hydroxide, (P.), B., 660.

Montgomery, J. A., tar bitumen emulsions, (P.), B., 148.

Montgomery, E. W., pernicious anaemia. I., A., 1269.

Monti, M. See Scagliarini, G.

Montigne, E., cholesterol, A., 1136.

Moog, R. See Desgraz, H.

Moor, W. G., and Wayne, W. P., treatment of packing-house sewage, B., 422.

Moore, A. R., photolysis of the luminescent granules of *Eucharis multicornis*, A., 760.

Moore, E. K. See McLaughlin, G. D.

Moore, E. S., sources of carbon in the pre-Cambrian formations, A., 143.

Moore, F. H. See Hodgson, H. H.

Moore, F. W. See Hartley, W. A.

Moore, H., valuation of motor spirit and lubricating oils, B., 227.

determination of unsaturated hydrocarbons, B., 395.

Moore, H., and Hobson, R. B., composition of cracked spirit, B., 227.

Moore, H. C., and Morse, P. A., Babcock-Gerber method for determining the fat in ice-cream, B., 895.

Moore, H. F., failure of metals by fatigue, B., 951.

Moore, H. K., and Brown Co., multiple-effect evaporative separation, (P.), B., 520.

Moore, H. R., attempt to excite a mercury surface by electron bombardment, A., 105.

Moore, J. See Burmah Oil Co.

Moore, R. L. See Spear, E. B.

Moore, R. W., and General Electric Co., purification of highly oxidisable metals [uranium], (P.), B., 197.

Moore, T. See Willmott, S. G.

Moore, W., and Vreeland, C. D., fungicide, (P.), B., 685.

Moorhouse, V. H. K. See Cameron, A. T.

Moppett, W., X-ray apparatus, (P.), B., 592.

Morales, R. See Georgia, F. R.

Moran, R. C., and Du Pont de Nemours & Co., E. I., explosive [trinitrophenyl-nitroaminoethyl nitrate], (P.), B., 78.

nitroglucoside explosive, (P.), B., 613.

Moran, T., freezing of gelatin gel, A., 904.

Moran, M., direct determination of the relative proportions of the isotopes of lithium, A., 331.

Morani, V., essential oil of *Laurus nobilis*, L., B., 645.

Morávek, V., growth of structures formed by reactions at the boundary between solutions of electrolytes in water and those in gels, A., 20.

Morel, G. See Delaby, R.

Morel, R. See Mestrezat, W.

Morera, V. See Ithurral, E. M. F.

Moreschi, A., extraction of bromine from salt liquors, B., 875.

Morey, G. W., a half-century of progress in the glass industry, B., 824*.

Morgan, A. F., and Osburn, D. F., effect of deficiency of vitamin-A on nitrogenous metabolism, A., 436.

Morgan, B. H., fuel for internal-combustion engines, (P.), B., 232*.

Morgan, G. T. [with Corby, F. J., Elvins, O. C., Jones, E., Kellett, R. E., and Taylor, C. J. A.], production of cyclotelluripentanedione dichlorides, A., 188.

Morgan, G. T., and Astbury, W. T., crystal structure and chemical constitution of basic beryllium acetate and its homologues, A., 995.

Morgan, G. T., and Burstall, F. H., residual affinity and co-ordination. XXVIII. Ethylenediammine copper salts, A., 1027.

Morgan, G. T., Carter, S. R., and Harrison, W. F., residual affinity and co-ordination. II. Thermal measurements on derivatives of cupric iodide, A., 1008.

Morgan, G. T., Cooper, E. A., and Rawson, A. E., bactericidal action of the cyclotelluripentanediones and their derivatives, B., 618.

Morgan, G. T., and Davies, G. R., antimonial analogues of the cacodyl series, A., 507.

Morgan, G. T., and Drew, H. D. K., interactions of tellurium tetrachloride and aryl alkyl ethers, I., A., 83.

Morgan, G. T., and Elvins, O. C., interactions of tellurium tetrachloride and monoketones, A., 188.

Morgan, G. T., and Hickinbottom, W. J., separation of the constituents of commercial xylidine, B., 666.

Morgan, G. T., Hickinbottom, W. J., and Barker, T. V., stereoisomeric diaryl-Bu-diamino-n-butanes, A., 503.

Morgan, G. T., and Holmes, E., Claisen reaction, A., 148.

X-ray identification of the higher fatty acids, A., 712.

Morgan, G. T., and Kellett, R. E., tellurium tetrachloride and aryl alkyl ethers, A., 747.

Morgan, G. T., and Porter, C. R., carboxylated β -diketones, A., 830.

Morgan, G. T., and Smith, J. D. M., residual affinity and co-ordination. XXVI. Quadridentate group in combination with bivalent metals, A., 600.

Morgan, G. T., and Taylor, C. J. A., keto-enol isomerism of ethylenebisacetylacetone, A., 273.

Morgan, G. T., and Thomason, R. W., nitration of fluorene; 2:5-dinitrofluorene, A., 1239.

Morgan, G. T., and Yarsley, V. E., acenaphthene series. IV. Aminoacenaphthensulphuric acids, A., 280.

dimethylstibine cyanide, an analogue of cacodyl cyanide, A., 508.

Morgan, H. H., need for research in the oil and colour industry, B., 373.

Morgan, J. L. R., and Lammert, (Mis) O. M., factors influencing the accuracy of measurements of the electrical conductivity of liquids and solutions. II. Discussion of the bridge assembly for the measurement of electrical conductivity with particular reference to the Vreeland oscillator as a source of current of constant frequency, A., 686.

Morgan, *J. S.*, and Thermal Industrial and Chemical (T.I.C.) Research Co., Ltd., destructive distillation of wood, (P.), B., 655*.

Morgan, *J. S.* See also Duckham, *A. M.C.*

Morgan, *S. F.* See Hartmann, *M. L.*

Morgan, *T. W.*, Murray, *W. W.*, and Continental Can Co., preventing discoloration of canned foods, (P.), B., 214.

Morgan, *W. T. J.*, butyl esters of the simpler amino-acids, I., A., 276.

Morgan Construction Co., reversal and control of regenerative furnaces, (P.), B., 1000*.

Morgan Construction Co. See also Lummis, *C. W.*

Morgan Crucible Co., and Speirs, *C. W.*, kilns and other heat treatment furnaces, (P.), B., 948.

Morgan & Wright, and Meyer, *E. E. A. G.*, compounding of rubber and the like, (P.), B., 761*.

Morgan & Wright. See also Meyer, *E. E. A. G.*

Morgans, *A. E.*, manufacture of a pigment from galena, (P.), B., 595.

Morgen, *R. A.*, and Hildebrand, *J. H.*, free energy of hydrogen fluoride, A., 578.

Morgen, *R. A.* See also Koppers Co.

Morgenreiter, *R.*, treating seed hulls [to produce paper pulp], (P.), B., 269.

Morgulis, *S.*, blood changes during digestion; urea formation, A., 428.

Morgulis, *S.*, Beber, *M.*, and Rabkin, *I.*, effect of temperature on the catalase reaction. I. Effect of concentration of hydrogen peroxide. II. Loss of catalase activity. III. Effect of p_H . IV. Theory of catalase reaction, A., 976.

Mori, *T.* See Susuki, *U.*

Morin, *G.*, nitration of various cellulose, B., 722.

Morin-Krop, *H.*, stone- or porcelain-like mass, (P.), B., 275.

Morison, *C. G. T.* See Doyne, *H. C.*

Morison, *D. B.*, apparatus for separating oil from liquids, (P.), B., 81*.

Moritz, *A. R.*, calcium of the blood-serum in experimental hypo- and hypercalcaemia, A., 425.

Moritz, *F. E. B.*, and Fuller, *D. H. F.*, modification of malt in relation to the stability of beer, B., 602.

Moritz, *F. E. B.* See also Fuller, *D. H. F.*

Moritz, *R.*, [manufacture of] sulphuric acid, (P.), B., 191.

Moriyasu, *S.* See Tabata, *K.*

Moro, *P.*, [manufacture of] cellulose xanthate, (P.), B., 401.

Morosov, *N. I.*, rhythmic phenomena in the precipitation of suspensions of red mercuric sulphide, A., 679.

Morozevich, *J.*, some iron-alkali-amphiboles, A., 266.

Morrall, *J.* See Chapman, *S.*

Morrall, *J. C.*, emulsion, (P.), B., 231.

Morrall, *J. C.*, and Egloff, *G.*, sulphuric acid absorption and iodine values of various petroleum products and cracked distillates, B., 116.

anti-knock motor fuels by cracking shale oil, B., 810.

Morrall, *J. C.*, and Universal Oil Products Co., refining hydrocarbon oils, (P.), B., 231.

refining [mineral] oils; refining cracked hydrocarbon oil, (P.), B., 231.

Morrall, *J. C.* See also Egloff, *G.*

Morrall, *R. S.* See Adam, *N. K.*

Morris, *H. L.* See Gilman, *H.*, and Shepard, *N. A.*

Morris, *L. E.*, mildew in cotton goods; growth of mould fungi on sizing and finishing materials, B., 186.

mildew in cotton goods; growth of mould fungi on steeped wheat flour, B., 187.

Morris, *V. H.*, and Welton, *F. A.*, determination of acid-hydrolysable carbohydrates in green plant tissue, B., 930.

Morrison, *E.* See Shafor, *R. W.*

Morrison, *F. R.*, fixed oil of the seeds of "Kurratong" (*Brachychiton populneum*, B.Br., syn. *Sterculia diversifolia*, G. Don), B., 794.

Morrison, *J. A. S.*, tanning and the manufacture of tanning materials, (P.), B., 505*.

Morse, *E. H.*, laboratory preparation of viscose, B., 482.

Morse, *H. W.*, and Compagnie du Boles, flotation of ores, (P.), B., 674.

Morse, *I. H.*, clarifying saccharine liquors, (P.), B., 459.

Morse, *M.* See Hunter, *W. H.*

Morse, *P. A.* See Moore, *H. C.*

Mort, *T. L.* See Know Mill Printing Co., Ltd.

Morterud, *E.*, digesting pulp in rotating digesters, (P.), B., 152.

Mortimer, *G.*, die-casting of aluminium alloys, B., 326, 792*.

Morton, *C.*, basic [dissociation] constant of morphine and its application in the titration of morphine, B., 644.

dissociation and volumetric determination of the cinchona alkaloids, B., 801.

Morton, *F. M.*, and Morton, *G. W.*, dye vat, (P.), B., 536.

raw-stock-dyeing apparatus, (P.), B., 536.

Morton, *G. W.* See Morton, *F. M.*

Morton, *J.*, Jones, *J. I. M.*, Wyham, *B.*, Harris, *J. E. G.*, and Morton Sundour Fabrics, Ltd., [vat] dyes and dyeing, (P.), B., 625.

Morton, *J.*, Jones, *J. I. M.*, Wyham, *B.*, Harris, *J. E. G.*, Wilson, *J.*, and Morton Sundour Fabrics, Ltd., dyes and dyeing; [soluble products from vat dyes], (P.), B., 403.

Morton, *J.* See also Jones, *J. I. M.*

Morton, *J. K.*, and Spencer, *G. C.*, determination of formic acid in food products, B., 606.

Morton, *R. A.*, absorption spectra of mesityl oxide, A., 453.

Morton, *R. A.*, and Riding, *R. W.*, refractivity, ionisation potentials, and absorption spectra, A., 558.

Morton, *R. A.*, and Rogers, *E.*, absorption spectra and lactam-lactim tautomerism, A., 9.

absorption spectra and tautomerism. II. Ethyl mesityloxidoxalate, formyl-phenylacetate, and diacetylsuccinate, A., 454.

Morton, *R. A.*, and Rosney, *W. C. V.*, absorption spectra and tautomerism. I. Keto-enol tautomerism; ethyl acetoacetate, acetylacetone, and *a*-benzoyl-camphor, A., 454.

Morton, *R. A.*, and Tipping, *A. H.*, correlation of absorption spectra with ionisation in violic acid, A., 9.

Morton, *W. S.*, pulverising device, (P.), B., 856.

Morton Sundour Fabrics, Ltd. See Jones, *J. I. M.*, and Morton, *J.*

Moschel, *W.* See *I. G. Farbenind.* *A.-G.*, and Trautz, *M.*

Moschini, *A.*, influence of glucosamine on insulin hypoglycaemia; possible change of glucosamine into dextrose in the organism, A., 1063.

action of mono- and di-saccharides administered orally on insulin hypoglycaemia, A., 1063.

Moscovitch, *B.*, and "Lignojen" Maschinen- & Apparatebau Ges., tar separator, (P.), B., 6*.

Mosebach, *G.*, recovering lye from disintegrated celluloses, (P.), B., 122*.

apparatus for the recuperation of the lye from dissolved cellular substances, (P.), B., 627*.

Moser, *E.* See Jendrassik, *J.*

Moser, *H.*, buffers. I. Buffer capacity and biochemical action, A., 867.

Moser, *L.*, separation of zirconium from titanium, A., 1019.

Moser, *L.*, and Hanika, *F.*, absorption of carbon monoxide by solutions of cuprous chloride, A., 375.

Moser, *L.*, and Marian, *S.*, application of the thermal dissociation of ammonium halides in quantitative analysis, A., 814.

Moser, *L.*, and Maxymowicz, *W.*, determination of bismuth and its separation from lead and other metals by hydrolysis, A., 264.

use of porcelain filtering crucible in gravimetric analysis, A., 589.

Moser, *W.* See Society of Chemical Industry in Basle.

Moses, *C. G.*, and Reid, *E. E.*, action of sodium on alkyl disulphides, A., 497.

Mosettig, *E.* See Späth, *E.*

Moskovits, *N.*, acetone and similar compounds produced by fermentation, (P.), B., 509, 962.

Mosi, *G.* See Brass, *K.*

Mosonyi, *J.*, formation of gastric hydrochloric acid from chlorides of the blood, A., 538.

Moss, *S. A.*, and General Electric Co., gas producer, (P.), B., 230.

Moss, *S. W.*, and De Laval Separator Co., production of purified asphaltic residue from crude petroleum, (P.), B., 1005.

Moss, *W. L.* See Reeson, *J. N.*

Mosser, *H. A.*, and South Penn Oil Co., recovery of gasoline from natural gas, (P.), B., 120.

Mosby, *L.*, process of making artificial sponges [from cellulose esters], (P.), B., 122*.

Mott, *R. A.* See Chapman, *W. R.*

Motylevski, *Z.*, anilidophenylglycine, A., 828.

Motz, *O.* See Grube, *G.*

Moucha, *V.*, and Rögl, *C.*, condensation of salicylaldehyde with aliphatic aldehydes containing a branched carbon chain, A., 626.

Mougeot, *A.*, and Aubertot, *V.*, spring-waters containing hydrogen carbonates and the activity of invertase from beer yeast, A., 201.

Mougeot, *A.* See also Loeper, *M.*

Moulden, *J. C.*, Taplin, *B.*, and Metals Production, Ltd., heat treatment of oxidised copper ores, (P.), B., 590.

heat treatment and concentration of copper ores, (P.), B., 885.

Moulden, *J. C.* See also Mineral Separation, Ltd.

Mounfield, *J. D.*, and Wood, *J. K.*, effect of heat on chloral hydrate, A., 385.

Mountain, *E. D.*, Smithsonite from Rhodesia Broken Hill mines, A., 816.

identity of the Cobija and Lampa meteoritic stonies, A., 1119.

Mountain, *E. D.* See also Smith, *W. C.*

Moureu, *C.*, and Dufraisse, *C.*, autoxidation and anti-oxygenic action; catalytic action of nitrogen compounds, A., 681.

Moureu, *C.*, Dufraisse, *C.*, and Badche, *M.*, autoxidation and antioxygenic action; catalytic action of various nitrogen compounds, A., 1031.

Moureu, *C.*, Dufraisse, *C.*, and Butler, *C. L.*, rubrene peroxide, A., 945.

Moureu, *C.*, Dufraisse, *C.*, and Dean, *P. M.*, coloured hydrocarbon: rubrene, A., 945.

dissociable peroxide of rubrene, A., 945.

Moureu, *C.*, and Lepape, *A.*, amounts of krypton and xenon in air, A., 933.

Moureu, *C.*, Lepape, *A.*, Moureu, *H.*, and Geslin, *M.*, composition of natural gases from thermal sources in Madagascar and Réunion, A., 380.

Moureu, *H.* See Moureu, *C.*

Mouriand, and Leullier, *A.*, cholesterol content of the organs of the guinea-pig on a scorbutic diet, A., 1181.

Mouromtsev, *B. A.* See Ipatiev, *V. N.*

Mousson, *W.* See Rue, *J. D.*

Mozolovskiy, *V.*, and Hilarovicz, *H.*, nature of so-called serum antipepsin, A., 202.

Mozolovskiy, *V.*, and Parnas, *J. K.*, new form of quinhydrone electrode, A., 647.

Muchin, *G. E.*, and Faermann, *G. P.*, rate of diffusion and nature of solvent, A., 786.

Muddiman, *E. W.* See Davidson, *W. R.*

Mudge, *W. A.* See Internat. Nickel Co.

Muehleberger, *C. W.* See Young, *A. G.*

Mühlenchemie G.m.b.H., improving the baking properties of flour, (P.), B., 896.

Mühleldahl, *E. von*. See Blitz, *W.*

Mühlhaus, *A.*, dialysis, filtration, percolation; pore diameter of separating surfaces, B., 615.

Mühlhaus, *A.* See also Lindemann, *H.*

Mühlhaus, *F.* See Lindemann, *H.*

Müller, *A.* See Küster, *W.*

Müller, *Alex.*, imperfect crystallisation in certain long chain compounds, A., 665.

Müller, *Alex.* See also Tammann, *G.*

Müller, *Arno*, fractionating column, A., 931.

Müller, *B.*, counter-current jet condenser, B., 970.

Müller, *C.*, apparatus for direct registration of transparency curves of absorbing substances and of spectral effects, A., 109.

Müller, *C. E.*, and Grasselli Dyestuff Corporation, dyeing cellulose esters and ethers, (P.), B., 628*.

Müller, *Elizabeth*, action of insulin on the blood-sugar *in vitro*, A., 1180.

Müller, *Erich* (Dresden), electrolysis of chromium tioxide solutions, A., 913.

Müller, *Erich* (Dachsel), potentiometric titration (diazotisation) of amines, A., 314.

Müller, *Erich*, and Hentschel, *H.*, decomposition of formic acid by ultra-violet light, A., 1124.

Müller, *Erich* (Berlin), and Messe, *W.*, volumetric determination of chromium, A., 1222.

Müller, *Erich* (Berlin), and Chemische Fabrik Buckau, carrying out and controlling reactions, (P.), B., 256.

Müller, *Erich* (Berlin). See also Ellinghaus, *J.*

Müller, *Ernst*, action of hydrazine on nitro- and chloronitro-derivatives of benzene and naphthalene, I., A., 163.

oxidation of ammonia to nitrite in aqueous solution by means of oxygen in presence of metallic and dissolved copper, A., 362.

Müller, *Ernst*, and Hoffmann, *W.*, action of hydrazine on nitro- and chloronitro-derivatives of benzene and naphthalene. III. Action of hydrazine hydrate on 2:4:5-trichloronitrobenzene, A., 163.

Müller, *Ernst*, and Metzger, *H.*, formation of chloroalkylsulphoxide from crude acetylene and chlorine, A., 1224.



Müller, Ernst, and Weisbrod, K., action of hydrazine on nitro- and chloronitro-derivatives of benzene and naphthalene. IV. Action of hydrazine on 1-chloro-2:4-dinitronaphthalene, A., 163.
2:4-dinitro-*a*-naphthyl azide, A., 721.
potentiometric determination of gold, A., 1117.

Müller, Ernst, and Zimmermann, G., action of hydrazine on nitro- and chloronitro-derivatives of benzene and naphthalene. II. Action of hydrazine hydrate on some nitro- and chloronitro-compounds, A., 163.

Müller, E. F., Wiener, H. J., and Wiener, R. von E., mechanism of insulin action, A., 760.

Müller, F., See Wöhler, L.

Müller, Friedrich, potentiometric determination of the platinum metals, A., 1222.

Müller, F. G., electrolytic decomposition of ethyl alcohol, A., 45.
diacetylene [butadi-1,3-ene], A., 44.

Müller, G., activated charcoal for gasoline recovery, B., 940.

Müller, Georg, hypochlorous acid and the alkali hypochlorites, A., 258.

Müller, Gustav, stirring apparatus for use in potash analysis according to the tartaric acid method of Przybylla, A., 1021.

Müller, H., See Klein, G.

Müller, Hans, theory of the coagulation of polydisperse systems, A., 242.

Müller, Hans. See also Finow-G.m.b.H.

Müller, Heinrich, and Bradley, A. J., copper hydride and its crystal structure, A., 889.

Müller, Hilarius, [seed] stimulation and manuring, B., 764.

Müller, J., See Standinger, H.

Müller, Johannes, comparative experiments on the narcotic and toxic effects of some halogen derivatives of hydrocarbons, B., 75.

Müller, K., See Rupp, E.

Müller, K. O., See Brand, K.

Müller, L., effect of soil reaction on germination of meadow grasses and clovers, A., 1066.

Müller, O., See Dafert, O.

Müller, P. J., See Steinkopf, W.

Müller, R., See Cassella, L., & Co., and Kalischer, G.

Müller, Richard, See Fischer, Hans.

Müller, Robert, electrochemical behaviour of aluminium. I., A., 1105.
electrochemical behaviour of aluminium. II. Potential of the aluminium electrode in a solution of aluminium bromide in anhydrous pyridine and the solution equilibrium pyridine-aluminium bromide, A., 1105.

Müller, Robert, Grieng, F., and Mollang, J., electrochemistry of non-aqueous solutions. VII. Conductivity of dilute solutions of silver nitrate in twelve organic solvents and determination of the limiting value of the molecular conductivity, A., 1212.

Müller, Robert, Schimke, A., and Farmakides, N. M., precipitation of metals from non-aqueous solutions. I., A., 1016.

Müller, W., gas off-take pipes for fuel distillation retorts or coke ovens, (P.), B., 397.

Müller, W., and Heinrich, P. M., steam regenerative accumulators, (P.), B., 224*.

Müller, W., See Akt.-Ges. für Amin-Fab.

Müller, W., (Darmstadt). See Wöhler, L.

Müller, Walter, restriction of the formation of hydrogen bromide by iodine, A., 1100.

Müller, Wilhelm, determination of creatinine in soup preparations, B., 765.

Müller, W. J., gypsum-sulphuric acid process (of the Farbenfabr. vorm. Bayer & Co.), B., 271.

Müller, W. J., and Herrmann, W., determination of lignin in wood and wood cellulose, B., 455.

Müller-Clemm, H., and Gesellschaft für Chem. Produktion m.b.H., manufacture of a highly-active decolorising charcoal, (P.), B., 309*.

Müller-Clemm, H., Schmidt, Ervin, and Gesellschaft für Chem. Produktion m.b.H., process for making a highly-active charcoal in grains, (P.), B., 623*.

Müller-Cunradi, M., See L. G. Farbenind. A.-G.

Müller-Hanß, A., qualitative and economic importance of acid electric steel, B., 442.

Münch, G., See L. G. Farbenind. A.-G.

Münch, W., See Braun, J. von.

Münster, F., effect of calcium carbonate, gypsum, and sodium carbonate on soils rendered acid with hydrochloric and sulphuric acids, B., 207.
"asahi-promoloid," B., 684.
iron phosphate as plant nutrient, B., 763.
agricultural chemical investigations, B., 358.

Münzel, H., See Farbenfabriken vorm. F. Bayer & Co.

Muenzen, J. R., Cerecado, L. R., and Sherwin, C. P., metabolism of aromatic acids. VIII. Acetylation of amino-compounds, A., 539.
metabolism of aromatic acids. X. Fate of *m*-nitro, *m*-amino, *m*-hydroxy, and *m*-chloro-phenylacetic acids, A., 972.

Mugian, M., See Consortium für Elektrochem. Ind. G.m.b.H.

Mugler, J., evaporator plant, (P.), B., 982.

Mühler, F., separation of sulphur from gases containing hydrogen sulphide, and free from ammonia, (P.), B., 407.

Muirhead, C. M., See Firth, E. M.

Mukarji, B. K., and Dhar, N. K., energy changes in photochemical reactions in presence of iodine, A., 252.
after-effect in photochemical reactions, A., 566.
results of modern photochemical research, A., 1216.

Mukerji, B. K., See also Dhar, N. K.

Mukherjee, J. N., action of silica on electrolytes, A., 1112.

Mukherjee, J. N., and Chaudhury, S. G., variation of the charge of colloidal particles with concentration of electrolytes. I. Arsenious sulphide sol and acids, A., 352.

Mulder, C. H. R., See Backer, H. J.

Mulder, F. P., See Coster, D.

Mulford Co., H. K., See Masnoci, P.

Mulker Salt Co., See Robison, C. S.

Mull, J., See Zerban, F. W.

Mullaney, D. A., See British Thomson-Houston Co., Ltd.

Müller, L., comparison of meto-quinol and metoquinone developers, B., 997.

Müller, E., See also Manzoni, A.

Müller, E. F., See Knecht, E.

Müller, J. A., and Peytral, (Muc.) E., pyrolytic decomposition of formic acid, A., 636.

Müller, P., atomising liquids containing solid matter in solution or in suspension, (P.), B., 650*.

Mülligan, J. J., See Colcord, F. F.

Mulligan, J. L., and United States Smelting, Refining, and Mining Co., refining metals, (P.), B., 833.

Mulligan, M. J., electrolysis of soda-lime glass, A., 31.

Mulligan, R. S., one-valency-electron emitters of band spectra, A., 8.
electronic structure and band-spectrum structure in diatomic molecules. I. Statement of the postulates; interpretation of CuII, CH, and CO band-types, A., 451, 1079.

Mulligan, R. S., one-valency-electron emitters of band spectra, A., 8.
electronic structure and band-spectrum structure in diatomic molecules. II. The ZnII, CdII, and HgII molecules and their spectra, A., 452.

Mulligan, R. S., one-valency-electron emitters of band spectra, A., 8.
electronic states of the helium molecule, A., 452.

Mulligan, R. S., one-valency-electron emitters of band spectra, A., 8.
electronic structure and band-spectrum structure in diatomic molecules. III. Molecule formation and molecular structure, A., 637.

Mulligan, R. S., and Turner, L. A., excited states of the cuprous iodide molecule, and the band spectra of certain salts, A., 1079.

Mulligan, R. S., and Turner, L. A., ultra-violet arc lines of iodine, A., 1071.

Mullinix, J. C., See Brown, J. R.

Mulvaney, M., See Fred, E. B.

Mumford, R. W., and American Trona Corporation, evaporation of brines, (P.), B., 743.

Mumm, O., and Ludwig, H., 1:1'-dialkyltetrahydro-4:4'-dipyridyls, A., 961.

Mumm, O., and Neumann, R., two homologues of cinchomeronic acid and their degradation, A., 958.

Mummery, W. R., colorimetric determination of iron [in tea] by the ferrocyanide method, B., 993.

Munch, J. C., refractometric determination of alcohols and esters in aqueous and in cotton-seed oil solutions, A., 749.

Mund, W., ionisation by radon in spherical vessels, A., 771*.

Mund, W., and Bogaert, E., action of α -particles on benzene vapour, A., 508.

Mund, W., and Koch, W., chemical action of α -particles on acetylene, A., 481.

Munday, H. L., apparatus for exchanging heat in liquids or fluids, (P.), B., 729*.

Munro, L. A., and Johnson, F. M. G., sorption of vapours by alumina, A., 347.

Munro, L. A., See also Freeth, F. A.

Munro, R. J., See Dugdale, C. M.

Munroe, T. B., treating bagasse for fibre-making purposes, (P.), B., 401.

Munroe, T. B., See also Lathrop, E. C.

Munzert, H., See Elbner, A.

Mural, J., condensation of resorcinol with succinonitrile, A., 951.

Muraour, H., comparison between explosion temperatures calculated from specific heats and from explosion pressures, A., 480.
theory of anti-detonators, B., 116.

Muraour, H., influence of temperature on the energy of the combustion of powders, B., 722.
laws of combustion of colloidal powders. I., II., and III., B., 722, 854.

Murata, K., See Fuseya, G.

Murayama, Y., camphor group. I. Formation of camphor from turpentine oil, B., 75.

Murayama, Y., and Tanaka, S., camphor group. II. Formation of a new camphorcarboxylic acid from camphane-2-carboxylic esters, A., 619.

Murch, W. O., See Hewitt, L. F., and King, H.

Murdoch, F. M., extraction of copper from ores and the like, (P.), B., 548.

Murdock, C. C., location of the E.M.F. in a photo-active cell containing a fluorescent electrolyte, A., 1009.

Muret, P., See Grignard, T.

Murjahn, R., See Braun, J. von.

Murkin, J. R., inactivation of insulin by dextrose; genesis of diabetes, A., 435.

Murkin, J. R., See also Allen, R. S., Gaebler, O. H., and Hawley, E. E.

Murmann, E., See Spiritus-Fresshafte & Chemische Fabrik Hamburger Kuffner A.-G.

Murphy, A. J., constitution of the alloys of silver and tin, B., 278, 792*.

Murphy, A. J., See also Rosenhain, W.

Murphy, E. A., detection of grit in rubber pigments, B., 956.

Murphy, E. A., See also Twiss, D. F.

Murphy, G. B., See Bennett, H. T.

Murphy, G. M., See Bell, J. M.

Murphy, H. N., preparation and use of lactates [in brewing, etc.], (P.), B., 251.

Murphy, J. C., and Jones, D. B., proteins of wheat bran. III. Nutritive properties, A., 974.

Murphy, J. C., See also Csonka, F. A.

Murray, A., See Beebe, M. C.

Murray, C. D., See Van Slyke, L. D.

Murray, G. W., See Rhodes, F. H.

Murray, H. A., physiological ontogeny. A. Chicken embryos. IX. Iodine reaction for the determination of glutathione in the tissues as a function of age, A., 751.

Murray, H. A., physiological ontogeny. A. Chicken embryos. XI. The p_H , chloride, carbonic acid, and protein concentration in the tissues as functions of age, A., 1052.

Murray, T. L., electric welding process and apparatus, (P.), B., 855*.
furnaces, (P.), B., 357*.

Murray, T. E., See also Bennett, I. T.

Murray, W. J., See Davis, H. S.

Murray, W. S., oil- or gas-fired [pottery] kilns, (P.), B., 948.

Murray, W. W., See Morgan, T. W.

Musatti, J., and Pichetto, A., transformer oils and methods of testing them, B., 65.

Muschter, F. J. F., and Smit, R., influence of saturated fatty acids on the value of the Boerner number of lard, B., 637.

Muschter, F. J. F., and Visser, G., detection of α - in presence of β -palmitodistearin [detection of tallow, etc., in lard], B., 678.

Muth, F. B. F., Schmelzer, A., and Grasselli Dyestuff Corporation, vat sulphide dyes, (P.), B., 659*.

Muth, W., See Grün, R.

Muitelet, C. F., distinguishing reconstituted dried preserved peas from preserved green peas, B., 296.
acids in fruits used for jam making, B., 564.
influence of degree of maturity on the composition of peas, B., 644.

Myers, R. L., and Westinghouse Lamp Co., incandescence [electric] lamp, (P.), B., 446.

Myers, W. M., calcining as an aid to grinding [flint], B., 157.

Myers, W. M., See also Katz, S. H.

Myler, S. A., manufacture of articles from highly refractory materials, (P.), B., 14.

Myler, W. M. jun., See Augustine, C. L.

Mynter, E. H., See Winter, C.

Myrbäck, K., fermentation inhibitor, A., 95.

Myrbäck, *K.*, compounds of enzymes with inactivating substances. *II.*, *A.*, 1271.
 enzymes and inactivators, *A.*, 1174.
 Myrbäck, *K.* See also Euler, *H.* *ron.*

Myssowski, *L.*, and Tuwim, *L.*, absorption of high-frequency radiation in water, *A.*, 221.

N.

Naamlooze Vennootschap *Algemeene Chem. Produktenhandel*, separation of vaporised organic substances from gaseous mixtures, *(P.)*, *B.*, 223.

Naamlooze Vennootschap *Algemeene Chem. Produktenhandel*, and Meyer, *W. A.*, degreasing textiles [wool], *(P.)*, *B.*, 912.

Naamlooze Vennootschap *Algemeene Norit Maatschappij*, treatment of liquids, gasses, or solutions with active carbon, *(P.)*, *B.*, 223.
 hydrogenation of oils, fats, and fatty acids with carbon as carrier for the metallic catalyst, *(P.)*, *B.*, 333.

Naamlooze Vennootschap *Algemeene Norit Maatschappij*, and Sauer, *J. N. A.*, manufacturing active carbon, *(P.)*, *B.*, 1093.

Naamlooze Vennootschap *Bataafsche Petroleum Maatschappij*. See *Bataafsche Petroleum Maatschappij*.

Naamlooze Vennootschap *Handelmaatschappij Grikro*, manufacture of zinc oxide, *(P.)*, *B.*, 360.

Naamlooze Vennootschap *A. Jurgens' Margarinefabr.*, distilling fatty acids and other volatile substances from oils and fats, acid oils, and crude fatty acids, *(P.)*, *B.*, 448.

Naamlooze Vennootschap *A. Jurgens' Vereenigde Fabr.*, purifying and deodorising oils and fats, *(P.)*, *B.*, 419.

Naamlooze Vennootschap *Matechu Maats. tot Exploit. van Chem. Uitvindingen*, Kruger, *M.*, and Unkel, *S. H.*, production of pure table or the like salt from impure salt, *(P.)*, *B.*, 708.

Naamlooze Vennootschap *Nederlandsche Installatie Maatschappij Therma*, and Petersen, *A. O. H.*, evaporating solutions *in vacuo*, *(P.)*, *B.*, 113.

Naamlooze Vennootschap *Nederlandsche Kunststijdefabriek*, manufacture of artificial threads, films, and the like from viscose, *(P.)*, *B.*, 268.
 washing, bleaching, or dyeing textile materials wound on perforated bobbins, *(P.)*, *B.*, 317.
 production of colours or lustre on natural or artificial fibrous material, *(P.)*, *B.*, 437, 820*.

Naamlooze Vennootschap *Nederlandsche Kunststijdefabriek*. See also *Brit. Enka Artificial Silk Co., Ltd.*, and *Want, D. van der*.

Naamlooze Vennootschap *de Nederlandisch-Indische Ind.*, automatically regulating the juice level in evaporating or boiling apparatus of sugar-treating plants, *(P.)*, *B.*, 560.

Naamlooze Vennootschap *Noury & Van der Lande Handelmaatschappij*. See *Kroeker, T.*

Naamlooze Vennootschap *Philips' Gloeilampenfabrieken*, manufacture of highly refractory bodies [filaments, e.g., tungsten, etc., for electric incandescence lamps, etc.], *(P.)*, *B.*, 18.
 manufacture of rods, blocks, and the like consisting of very large crystals of highly refractory metals such as tungsten, *(P.)*, *B.*, 132.
 separating zirconium and hafnium halogenides, *(P.)*, *B.*, 156.
 manufacture of very thin wires, *(P.)*, *B.*, 245.
 separating a mixture of hafnium and zirconium compounds, *(P.)*, *B.*, 273.
 deposition of chemical compounds on incandescence bodies, *(P.)*, *B.*, 283.
 non-sagging spiral filaments of highly refractory metal [for incandescence lamps], *(P.)*, *B.*, 415.
 oxide cathodes for discharge tubes; oxide cathode discharge tubes, *(P.)*, *B.*, 757, 834.
 depositing hafnium and zirconium upon incandescent [electric lamp] filaments, *(P.)*, *B.*, 886.

Naamlooze Vennootschap *Philips' Gloeilampenfabrieken*, Coster, *D.*, and Hevesy, *G.*, separating hafnium and zirconium, *(P.)*, *B.*, 12.

Naamlooze Vennootschap *Philips' Gloeilampenfabrieken*. See also *Arkel, A. E. tan*, and *Coster, D.*

Naamlooze Vennootschap *Silica en Ovenbouw Mij.*, operating horizontal chamber ovens, *(P.)*, *B.*, 732.
 coke-ovens, *(P.)*, *B.*, 861.

Naamlooze Vennootschap *Silica en Ovenbouw Mij.*, and *Otto & Co., C.*, heating of coke ovens, *(P.)*, *B.*, 621.
 operating vertical chamber ovens to produce water-gas, *(P.)*, *B.*, 699.

Naamlooze Vennootschap *Stikstofbindingsind "Nederland."* See *Hamburger, L.*

Nachmann, *M.* See *Zetsche, F.*

Nachod, *H.* See *Patent-Treuhand Ges. für Elektrische Glühlampen*.

Nachr, *E.* See *Posner, T.*

Nachtwy, *P.* See *Arndt, F.*

Nadler, *J. E.* See *Salant, W.*

Nádor, *I.* micro-determination of the globulin content of the cerebrospinal fluid, *A.*, 648.

Nadson, *G. A.*, and *Zolkevič, A. J.*, antagonism of potassium to X-rays and radium, *A.*, 91.

Naeff & Co., *M.*, preparation of monocyclic ketones with more than nine ring members, *(P.)*, *B.*, 608.

Naeff, *E.*, protecting furs, wool, and similar materials from attack by moth, *(P.)*, *B.*, 47.

Naegele, *K.*, indicator for acidimetry and alkalimetry; turbidity indicators, *A.*, 355.

Næsler, *G.* See *Roth, W. A.*

Nagai, *S.* See *Tanaka, Y.*

Nagai, *Y.*, inflammability of alkyl halides and their influence on the limit of inflammability of ether-air and hydrocarbon-air mixtures, *A.*, 1106.

Nagai, *Y.* See also *Tanaka, Y.*

Naganishi, *H.*, formation of polysaccharides by yeast preparations, *A.*, 977.

Nagaoka, *H.*, band spectra and electronic configuration of nitrogen and carbon monoxide molecules, *A.*, 107.
 band spectra of mercury, *A.*, 108.
 number of electrons and α -particles in atomic nuclei, *A.*, 1975.
 nucleus of helium atom or α -particle, *A.*, 1076.

Nagaoka, *H.*, and *Futagami, T.*, occurrence of harmonics in spectral lines, *A.*, 1069.
 coincidence of some spectral lines of gold and thallium, *A.*, 1071.
 lines of transformation products of uranium and thorium in the spectra of these elements, *A.*, 1077.

Nagaoka, *H.*, *Futagami, T.*, and *Obata, H.*, spectra of metals excited by means of high tension and heavy current, *A.*, 1069.

Nagaoka, *H.*, and *Mishima, T.*, fine structure of cadmium lines, *A.*, 1071.
 fine structure of bismuth lines, *A.*, 1072.
 interferential spectroscope for accurate measurement of wave-lengths, *A.*, 1118.

Nagaoka, *H.*, and *Sugiria, T.*, regularity in the distribution of spectral lines of iron and intra-atomic magnetic field, *A.*, 102.

Nagasaye, *S.*, assimilation of levulose, galactose, and dextrose in fasting and on a protein-fat diet, *A.*, 1055.

Nagel, *A.* See *Klemenc, A.*

Nagel, *A.* See *Jura Oelschiefer-Werke, A.-G.*

Nagel, *W.*, softening point of resins, *B.*, 333.

Nagel, *W.*, and *Grüss, J.*, Chinese wood oil, *A.*, 198.
 tung oil, *B.*, 164.

Nagel, *W.* See also *Siemens & Halske A.-G.*

Nagell, *H.* See *Kirchner, O.*

Nagtegaal, *J.*, manufacture of active carbon, *(P.)*, *B.*, 971.

Nasmith, *S.* See *Open-Hearth Combustion Co.*

Nakahara, *W.*, influence of vitamin-A on the absorption of a foreign fat, *A.*, 760.

Nakai, *T.*, gastric juice of the pregnant woman, *A.*, 1052.

Nakajima, *S.* See *Kita, G.*

Nakamichi, *K.*, occurrence of fatty substances in the human ear, *A.*, 857.

Nakamura, *G.*, simple vacuum tube demonstrating the Doppler effect on the Balmer lines of hydrogen, *A.*, 873.
 band spectra of halogens. I. Absorption of iodine vapour. II. Analysis of the band spectrum of iodine, bromine, and chlorine, *A.*, 882.

Nakamura, *M.*, quantitative analysis of woman's colostrum, *A.*, 858.

Nakamura, *N.*, occurrence of methyl mercaptan in fresh *Raphanus* roots (Daikon, *Raphanus sativus*, *L.*), *A.*, 210.

Nakamura, *T.*, decomposition of sugar in the skin, *A.*, 863.

Nakamura, *T.* See also *Tadokoro, T.*, and *Wohlgemuth, J.*

Nakashima, *R.*, digestibility of deaminated proteins by proteolytic enzymes, *A.*, 1060.

Nakashima, *T.* See *Kita, G.*

Nakatsuchi, *A.*, fusion curves of the systems benzene-*m*-xylene, toluene-*m*-xylene, and *m*-xylene-*p*-xylene, *A.*, 632.

Nakatsuchi, *A.* See also *Mitsukuri, S.*

Nakaya, *U.* See *Terada, T.*

Nakazono, *T.* and *Inoko, S.*, quantitative analysis using bromine. I. Determination of thiocyanic acid, arsenious acid, and antimony, *A.*, 1115.

Nakazono, *T.* See also *Wada, I.*

Nakhmanovich, *M. I.*, molecular condition of sucrose in aqueous solution, *A.*, 906.

Nametkin, *S.*, and *Briusova, L. J.*, determination of unsaturated in presence of saturated and tricyclic hydrocarbons; the direction of dehydration of alcohols, *A.*, 420.
 homologues of the camphor group. IV. Methyltricyclicene in relation to the dehydration of methylfenchyl alcohol, *A.*, 619.

Nametkin, *S.*, and *Kursanov, D.*, dehydration of benzyl alcohol by the xanthate method, *A.*, 393.

Nametkin, *S.*, and *Madaev-Sitschev, O.*, nitration of decahydronaphthalene, *A.*, 508.

Nametkin, *S.*, and *Zabrodin, A.*, truc α -camphene, *A.*, 521.

Namysłowski, *S.* See *Korczyński, A.*

Nanai, *E.* See *Matsui, M.*

Nanji, *D. R.*, and *Beazley, R. G. L.*, complete analysis of mixtures of starch sugars and cane sugar products, *B.*, 685.
 hydrolysis of starch by acids, *B.*, 685.

Nanji, *D. R.*, and *Norman, A. G.*, pectin: micro-method for the determination of methyl alcohol, and its application to the study of the conditions governing the de-esterification of pectinogen, *B.*, 930.

Naphthal, *M.*, naphthenic acids, *A.*, 286.

Napper, *S. S.* See *Courttauds, Ltd.*

Narat, *A.* See *Trautz, M.*

Narayan, *A. L.*, and *Rao, K. R.*, 4722 line of bismuth and the nature of "rare ultimates," *A.*, 767.
 absorption and series spectra of nickel, *A.*, 1070.

Narita, *S.* See *Brugsch, T.*

Naryschkin, *N. A.* See *Godnev, T. N.*

Nasarow, *N. S.*, mechanism of conduction of electric current in metals, *A.*, 878.

Nash, *A. W.* See *Bowen, A. R.*, and *Elvins, O. C.*

Nash, *T. P. jun.*, insulin and phloridzin diabetes. II., *A.*, 136.

Nash, *T. P. jun.* See also *Benedict, S. R.*

Nasini, *R.*, is orthoboric acid volatile in steam? *A.*, 787.
 S. Cannizzaro's contribution to the development of the concept of valency, *A.*, 1223.

Nasini, *R.*, and *Porlezza, C.*, determination of p_{H_2} in natural waters. I., *B.*, 694.

Nasini, *R.*, *Porlezza, C.*, and *Donati, A.*, waters of Bagno di Roselle (Grosseto), *A.*, 595.

Naske, *C.*, kiln for burning cement and for similar purposes, *(P.)*, *B.*, 409.

Nassau, *E.* See *Meyer, L. F.*

Nastjukov, *A.*, determination of the formolite value, *B.*, 860.

National Air Filter Co., and *Birkholz, H. E.*, air filters, *(P.)*, *B.*, 937*.

National Aniline & Chemical Co. See *Cunningham, O. D.*, *Daniels, L. C.*, *Derick, C. G.*, *Geller, L. W.*, *Hillger, H. W.*, *Lewis, H. F.*, *Lyford, C. A.*, *Nelson, R. A.*, *Ralph, W. M.*, *Rogers, D. G.*, *Schneld, J. G.*, *Spalding, W. L.*, and *Wenker, H.*

National Boiler Washing Co. of Illinois. See *Otis, S.*

National Carbon Co. See *Eldred, B. E.*, *Heise, G. W.*, and *Walden, A. S.*

National Lead Co. See *Tolman, C. P.*

National Lime Association. See *Mathers, F. C.*

National Magnesia Manufacturing Co. See *Libby, G. N.*

National Trust Co., Ltd. See *Peek, R. L.*

Naton, *J.* See *Taufé, K.*

Natta, *G.*, crystal structure of cadmium and nickel hydroxides, *A.*, 228.
 action of aluminium scelenide, telluride, and arsenide and of magnesium arsenide on alcohols and ethers, *A.*, 1023.

Natta, *G.*, and *Reina, A.*, crystal structure of cobaltous oxide and hydroxide, *A.*, 996.

Natta, *G.*, and *Schmid, F.*, oxides and hydroxides of cobalt. II. Crystalline structure of the salicin oxide of cobalt, *A.*, 1085.

Naugatuck Chemical Co., alkylation of aromatic hydrocarbons, *(P.)*, *B.*, 1028.

Naugatuck Chemical Co., and *Ostromisslenski, I.*, manufacture of polymerised styrene and its homologues, *(P.)*, *B.*, 451.

Naugatuck Chemical Co., Ostromislensky, *I.*, and Gibbons, *W. A.*, manufacture of polymerised styrene, (*P.*), *B.*, 451.
 Naugatuck Chemical Co., Ostromislensky, *I.*, and Shepard, *M. G.*, manufacture of styrol and its homologues, (*P.*), *B.*, 299.
 Naugatuck Chemical Co. See also Cadwell, *S. M.*, Coffin, *J. G.*, Smith, *O. H.*, and Whitelsey, *T.*
 Naugle, *J. J.*, electric furnace, (*P.*), *B.*, 835.
 electric furnace for treating comminuted material, (*P.*), *B.*, 922.
 Naunton, *W. J. S.*, mechanism of the formation of triphenylguanidine and phenylthiocarbimide from thiocarbanilide, *A.*, 279.
 super-accelerators [for vulcanisation of rubber], *B.*, 797.
 Naunton, *W. J. S.* See also British Dyestuffs Corporation, Ltd.
 Navarro, *E.*, alkali xanthates as reagents for alkaloids, *A.*, 746.
 reactions of certain nitro-compounds with alkaloids, *A.*, 965.
 reactions of certain nitro-derivatives with alkaloids, *A.*, 1048.
 Navias, *L.*, metal porosimeter for determining the pore volume of highly vitrified ware, *B.*, 158.
 methods of testing and physical properties of wet-process electrical porcelain, *B.*, 823.
 Naville, *P.*, density of the system acetone-water at 20°, *A.*, 1199.
 Navratil, *E.* See Kupelwieser, *E.*
 Navrasky, *P.* See Badische Anilin- & Soda-Fab., and I. G. Farbenind. A.-G.
 Nayor, *T.*, dielectric constant of weak electrolytes, *A.*, 226.
 Nayor, *C. A.*, and Wheeler, *R. V.*, lag on ignition of fire-damp, *B.*, 178.
 Nayor, *W. H.*, behaviour of coke-oven gas at low temperatures, *B.*, 427.
 Neale, *A. E. T.* See Wood, *C. E.*
 Neale, *S. M.*, nature of solutions of cellulose in cuprammonium hydroxide, *A.*, 211.
 determination of deliquescent substances in sized cotton materials, *B.*, 971.
 Neath, *J.*, and Chaney, *W.*, distillation of coal, (*P.*), *B.*, 38.
 Neber, *P. W.*, and Friedolsheim, *A. von*, new type of rearrangement of oximes, *A.*, 1247.
 Neber, *P. W.*, and Paeschke, *S.*, substitution processes with butadiene derivatives, *A.*, 1119.
 Nechkhovitch, *M.*, dextrose and colloidal equilibria of lipins, *A.*, 537.
 Neckar Waterreiniger Maatschappij, and Hering, *J.*, purifying of boiler sludge and the heating and supply of boiler feed water, (*P.*), *B.*, 518.
 Nederlandse Technische Handel Maats. "Giro." See Otto, *W.*
 Needham, *D. M.* See Needham, *J.*
 Needham, *J.*, and Needham, *D. M.*, hydrogen-ion concentration and oxidation-reduction potential of the cell-interior before and after fertilisation and cleavage; micro-injection study on marine eggs, *A.*, 191.
 micro-injection studies on the oxidation-reduction potential of the cell-interior, *A.*, 545.
 Neef, *H.* See Scheibler, *H.*
 Neergaard, *K. von*, intravenous silver therapy. IV. Silver-ion concentration in the process of disinfection in physiological media. V. Oligodynamic silver solutions, *A.*, 92.
 intravenous silver therapy. VI. Bactericidal action of injections of ionised silver salts, *A.*, 200.
 Nees, *A. R.* See Shafor, *R. W.*
 Negelstein, *E.*, glycolysis of embryonic tissue, *A.*, 426.
 effect of hydrogen sulphide on chemical processes of the cell, *A.*, 431.
 Negl, *A.*, preparation of aluminium alloys, (*P.*), *B.*, 63.
 Neher, *F.*, and Fleece, *C. L.*, reactivity of halogenated ethers. I. Halogenated diethyl ethers and zinc, *A.*, 1122.
 Nehl, *F.* See Meyer, *H.*
 Nehring, *K.*, destruction of cement drain-pipes in soil, *B.*, 709.
 Neidich, *S. A.* See Mendel, *W.*
 Neidig, *R. E.*, mineral composition of sunflowers grown for silage, *A.*, 761.
 Neidig, *R. E.*, and Magnuson, *H. P.*, alkali [soil] studies. III. Tolerance of barley for alkali [salts] in Idaho soil, *B.*, 24.
 alkali [soil] studies. IV. Tolerance of oats for alkali [salts] in Idaho soil, *B.*, 207.
 Neil, *J.* See Augustine, *C. E.*
 Neil, *J. W.*, and Matsukata, *G.*, recovering copper [from ores], (*P.*), *B.*, 197.
 Neil, *O. S.*, production of ferric oxide, (*P.*), *B.*, 584.
 Nekoosa-Edwards Paper Co. See McBain, *B. T.*
 Nekrasov, *B.* See Schilov, *N.*
 Nelis, *P.*, attenuation and antigenic power of diphtheria toxin after treatment with various substances, *A.*, 1062.
 Nellensteyn, *F. J.*, direct hydration of aliphatic carbon, and the assimilation of carbon dioxide by plants, *B.*, 36.
 Neller, *J. R.*, effect of sulphur upon nitrogen content of legumes, *B.*, 208.
 sulphur as a plant food, *B.*, 842.
 Neller, *J. R.*, and Overley, *F. L.*, physical and chemical characteristics of maturing apples as related to the time of harvest, *B.*, 1027.
 Nelson, *D. H.* See Greaves, *J. E.*
 Nelson, *D. M.*, photographic spectra of triboluminescence, *A.*, 455.
 Nelson, *E. R.*, detection and determination of lactic acid in the presence of other organic acids [in fruit products], *B.*, 895.
 Nelson, *H. A.*, and Werthan, *S.*, traffic paint, *B.*, 924.
 Nelson, *J. M.*, and Anderson, *R. S.*, retardation of invertase action by dextrose and levulose, *A.*, 1059.
 Nelson, *J. M.*, and Post, *C. I.*, hydrolysis of sucrose by invertase in the presence of α -methylglucoside, *II.*, *A.*, 865.
 Nelson, *R. A.*, and National Aniline & Chemical Co., production of α -nitronaphthalene- β -sulphon-phthalic acids, (*P.*), *B.*, 869.
 Nelson, *R. E.*, and Aitkenhead, *W. C.*, acyl derivatives of α -aminophenol. *II.*, *A.*, 833.
 Nelson, *R. E.*, and Davis, *H. L.*, acyl derivatives of α -aminophenol. *I.*, *A.*, 833.
 Nelson, *V. E.*, and McCay, *C. M.*, metabolism and vitamin-A, *A.*, 1065.
 Nelson, *V. E.* See also Anderegg, *L. T.*
 Nelson, *W. L.*, and Engelder, *C. J.*, thermal decomposition of formic acid, *A.*, 693.
 Nemeo, *A.*, formation of humus in dead surface layers of forest soils, *B.*, 335.
 chemical method of determining phosphoric acid requirements of agricultural soils, *B.*, 762.
 chemical methods for determining whether soils need nitrogenous or potassium fertilisers, *B.*, 926.
 Nemeo, *M.*, and Gracanin, *M.*, influence of light on the absorption by plants of phosphoric acid and potassium, *A.*, 646.
 Nemito, *L.*, hardening copper, (*P.*), *B.*, 215.
 Nemoto, *C.* See Ogawa, *W.*
 Nonitzescu, *C.* See Fischer, *Hans.*
 Neresheimer, *H.* See Badische Anilin- & Soda-Fab.
 Nernst, *W.*, and Orthmann, *W.*, heat of dilution of salts at very low concentrations, *A.*, 579.
 Nesmejanov, *A. N.* See Rakuzin, *M. A.*
 Ness, *C.*, and Prest-O-Lite Co., filling mass for containers for explosive gases, (*P.*), *B.*, 779.
 Nestle, *K. T.* See Rehlein, *H.*
 Nettai Sangyo Kabushiki Kaisha, insecticidal or other toxic substances from plants of the *Derris* species, (*P.*), *B.*, 843.
 Nettel, *F.*, production of articles from vitreous slags and glass refuse, (*P.*), *B.*, 192.
 Netter, *H.* See Mond, *R.*
 Neubauer, *E.*, behaviour and action of bile acids in the organism, *A.*, 1056.
 Neubauer, *H.*, determination of manurial requirements of soils by laboratory methods, *B.*, 378.
 Neubauer, *K.* See Badische Anilin- & Soda-Fab.
 Neuberg, *C.*, cuzyme problem, *A.*, 1173.
 Neuberg, *C.*, and Behrens, *M.*, enzymic production of sucrose from sucrose-phosphates, *A.*, 542.
 Neuberg, *C.*, Behrens, *M.*, Dalmer, *O.*, Hatano, *J.*, Rosenfeld, *L.*, and Sabetay, *S.*, chemical and biochemical degradations of sucrose-phosphoric acid, *A.*, 941.
 Neuberg, *C.*, and Dalmer, *O.*, aldehyde acetal of methylglyoxal, *A.*, 148.
 Neuberg, *C.*, and Gorr, *G.*, mechanism of lactic acid formation by bacteria. I. and II., *A.*, 97, 323.
 "crossed dismutatior" between aldehyde and ketone, *A.*, 272.
 conversion of methylglyoxal into pyruvic acid, *A.*, 272.
 mechanism of the formation of lactic acid in phanerogams. I. and II., *A.*, 761, 872.
 production of lactic acid from sugar by various methylglyoxal-dismutating bacteria, and a simple means of isolating [zinc] lactate, *A.*, 868.
 Neuberg, *C.*, and Gottschalk, *A.*, physiological behaviour of acetyl methylcarbinol. II. Behaviour of acetyl methylcarbinol in the animal body, *A.*, 89.
 apozymase and co-zymase; mechanism of phosphorylation, *A.*, 95.
 detection of acetaldehyde as an intermediate stage in the anaerobic respiration of higher plants, *A.*, 98.
 Neuberg, *C.*, and Kobel, *M.*, physiological behaviour of acetyl methylcarbinol. I. Behaviour of acetyl methylcarbinol to yeast, *A.*, 96.
 reaction of levulose with alanine, *A.*, 151.
 comparative cell-free fermentation of hexosediphosphoric acid, dextrose, levulose, sucrose, and invert-sugar, *A.*, 322.
 fermentation of hexosediphosphoric acid, dextrose, levulose, sucrose, and invert-sugar by yeast juice and fresh yeast, *A.*, 1061.
 reaction between sugars and amino-acids; fermentation of mixtures of amino-acids and sugars, *A.*, 1061.
 action of varying quantities of arsenate on phosphorylation, *A.*, 1108.
 Neuberg, *C.*, and Oppenheimer, *C.*, nomenclature of fermentation enzymes and oxido-enzymes, *A.*, 323.
 Neuberg, *C.*, and Perlmann, *G.*, alcoholic fermentation in presence of hydrogen sulphide and hydrogen cyanide, *A.*, 434.
 Neuberg, *C.*, and Sabetay, *S.*, enzymic hydrolysis of sucrose-phosphoric acid into levulose and dextrose-phosphoric acid, *A.*, 93.
 soluble and insoluble salts of hexosediphosphoric acid, *A.*, 152.
 Neuberg, *C.*, and Simon, *E.*, behaviour of *p*-xyloquinone towards yeast, *A.*, 758.
 dismutation of α -methylbutyldialdehyde, *A.*, 1062.
 Neuberg, *C.*, and Wagner, *J.*, phosphatase and the preparation of acid esters of pyrophosphoric acid, *A.*, 757.
 sulphatase. VIII. Difference between sulphatase and myrosinase, *A.*, 1060.
 Neuberg, *C.*, and Windisch, *P.*, acetic fermentation and the chemical processes carried out by acetic acid bacteria, *A.*, 324.
 Neuberg, *J.* See Snapper, *J.*
 Neubronner, *K.*, Iolzolene shale and shale oil, *B.*, 258.
 Neue Glühlampen-Ges.m.b.H., and Hauschild, *M.*, metallic filaments for electric incandescence lamps, (*P.*), *B.*, 1019.
 Neuendorff, *G.* See Sauerwald, *F.*
 Neustein, *W. von*, viscosity anomalies in cellulose sols, *A.*, 677.
 Neufeld, *E.* See Margosches, *B. M.*
 Neugebauer, *W.* See Kalle & Co. A.-G.
 Nouhaus, *W.*, and Opderbeck, *E.*, manufacture of porous building material for insulating purposes for coal slack, etc., (*P.*), *B.*, 364.
 Neuhauser, *A.*, making concentrated sour milk, (*P.*), *B.*, 419.
 Neuhof, *E.* See Gadamer, *J.*
 Neukircher, *H.* See Freudlich, *H.*
 Neumaerker, *J.* See Stocrmer, *R.*
 Neumaier, *J. E.*, and Lignite Pressed Coal Co., lignite distillation apparatus, (*P.*), *B.*, 524.
 Neumann, *B.*, potential of fluorine from the decomposition potentials of fused fluorides, *A.*, 803.
 Neumann, *B.*, and Domke, *R.*, production of hydrogen chloride from chlorine and steam in the presence of carbon, *B.*, 358.
 Neumann, *B.*, and Hauck, *F.*, constitution of bleaching powder, *B.*, 190.
 Neumann, *B.*, Steuer, *W.*, and Domke, *R.*, production of hydrogen bromide from bromine and water vapour in the presence of carbon, *B.*, 358.
 manufacture of hydrochloric acid from chlorine and steam (*P.*), *B.*, 665.
 Neumann, *B.* See also Ditz, *H.*
 Neumann, *F.*, manufacture of mercurated hydroaromatic hydrocarbons, (*P.*), *B.*, 965.
 Neumann, *H.* See Posner, *T.*
 Neumann, *L.* See Akt.-Ges. für Anilin-Fab.
 Neumann, *R.* See Mumm, *O.*
 Neumann, *W.* See Klopstock, *H.*
 Neurath, *B.* See Bondi, *H.*
 Neurath, *J.* See Post, *C. I.*
 Nevens, *W. B.* See Gaines, *W. L.*
 Nevile, *H. A.*, adsorption and reaction. I. Setting of plaster of Paris, *A.*, 899.
 adsorption and reaction. II. Setting of litharge-glycerol cement, *A.*, 1092.
 Neyvas, *J.*, and Lowy, *A.*, electrochemical reduction of indigo, *A.*, 1111.
 New England Fuel & Transportation Co. See Folsom, *R. M.*
 New England Mica Co. See Dawes, *C. L.*
 New Jersey Zinc Co. See Borchert, *W. O.*, Breyer, *F. G.*, and Peirce, *W. M.*
 New York Zinc Co. See Wade, *W. R.*
 Newall, *G. S.* See Washington Chemical Co., Ltd.

Newall, H. E., and Sinnatt, F. S., combustion of particles of coal in air; censpheres. II., B., 905.

Newberry, G., and May & Baker, Ltd., manufacture of monoacetyl derivatives of aminocarylseleno-compounds, (P.), B., 420.

Newbound, R. See British Thomson-Houston Co., Ltd.

Newcomb, G., determination of alcohol and ethyl chloride in chloroform, B., 172.

Newell, M. H., and Alloys Co., apparatus for manufacturing metal dust, (P.), B., 163.

Newhall, C. A., compounds of copper for use in combating fungi, (P.), B., 1011.

Newhall, H. B. See Karitzky, F. W.

Newhouse, R. C., and Allis-Chalmers Manufacturing Co., process of treating slurry, (P.), B., 709.

commuting mill, (P.), B., 728.

Newitt, D. M. See Bone, W. A.

Newkirk, W. B., and International Patents Development Co., dextrose hydrate, (P.), B., 72.

making grape sugar, (P.), B., 291.

Newlands, G. See Hendriek, J.

Newlands, J. A., purifying waste waters, (P.), B., 110.

Newman, F. H., spectrum of rubidium at low voltages, A., 2.

enhanced lines produced by the interrupted arc in sodium and potassium vapours, A., 549.

low-voltage arc in cesium vapour, A., 550.

sodium arc in a vacuum, A., 650.

high-vacuum arc in hydrogen, A., 1060.

Newman, J. R. See Boone, C. E.

Newman, M. F., and Scaife, W. B., & Sons Co., process of softening water, (P.), B., 611.

Newport Co., purification and isolation of anthraquinone- β -sulphonic acid, (P.), B., 1007.

Newport Co. See also Brown, O. W., Goodrich, R. J., Gubelmann, I., and Palmer, R. C.

Newsome, P. T., influence of electrodes on the formation of ozone at low pressures in the electrical discharge, A., 919.

Newton, D. L., absorption tower, (P.), B., 176.

evaporating still [for mineral oil], (P.), B., 183.

distilling and blending hydrocarbons, (P.), B., 263.

Newton, E. B. See Benedict, S. R.

Newton, R., and Brown, W. R., seasonal changes in the composition of winter wheat plants in relation to frost resistance, B., 991.

Newton, W. L. See Evans, R. M.

Newton Chambers & Co., Ltd. See Miles, T. V.

Newton Process Manufacturing Co. See Kobernik, J. E.

Ney, A. H., and Haebler, T., blue mononzo-dyestuffs for wool or silk, (P.), B., 658.

Ni, T. G. See Lim, K. S.

Niagara Alkali Co. See MacMillan, J. R.

Niagara Pigment Corporation. See MacMillan, J. R.

Nicoll, E., potassium salts from sea-water, (P.), B., 237.

production of potassium salts, (P.), B., 360^o.

Nicholas, H. O., and Erickson, J. E. L., substituted amides. I. Preparation of substituted acetamides and the corresponding primary amines, A., 1031.

Nicholas, W. W., X-ray spectrometer with which wave-lengths are read directly on an ordinary micrometer screw, A., 215.

Nicholls, E. G. See Atchley, D. W.

Nicholls, E. L., and Slattery, M. K., uranium as an activator [of luminescence], A., 659.

Nicholls, M. L., and Derbigny, I. A., reduction of nitrous oxide, A., 691.

Nicholls, M. L., and Thies, O. J., jun., influence of citrates on the precipitation of barium sulphate, A., 345.

Nicholls Copper Co. See Merriss, M. H.

Nicholson, E. E., and Beal, R. B., process of manufacturing beet sugar, (P.), B., 661.

Nicholson, V. S. See Haworth, W. N.

Nicloux, M., determination of ethylene in blood, A., 1058.

Nicloux, M., and Roche, J., reaction of potassium ferricyanide with blood pigment, A., 191.

oxygen content of methaemoglobin, A., 314, 423*, 750.

comparison of the sensitivities of methaemoglobin and of oxyhaemoglobin to a reducing agent, A., 1050.

Nicloux, M., and Yovanovitch, A., ethylene narcosis. I. Behaviour of the narcotic in blood. II. Distribution of ethylene between blood corpuscles and plasma *in vitro* and during narcosis, A., 1058.

Nicloux, M. See also Hackspill, L.

Nicodemus, O. See Farbw. vorm. Meister, Lucius, & Brüning.

Nicolai, H. W., determination of lipase in germinating pine-seeds, A., 1059.

Nicolai, H. W. See also Rona, P.

Nicolardot, P., nomenclature and classification of optical glasses, B., 407.

Nicolau, S. See Levaditi, C.

Nicoll, W. D. See Evans, W. L.

Nicole, P., aliphatic trisubstituted α -glycols, A., 382.

Nicolls, J. H. H., effect of exposing Canadian lignite to atmospheres of different humidities, B., 657.

fraility tests on various fuels sold in Canada, B., 657.

Nicolson, A. M., and Western Electric Co., method of growing crystals [with piezo-electric properties], (P.), B., 636.

Nicce, F. G., and International Holding Co., cracking hydrocarbons, (P.), B., 85*.

apparatus for treating hydrocarbons, (P.), B., 121*.

Niederbayerische Cellulosewerke A.-G., and Schneider, A., generation of steam and other vapours, (P.), B., 967.

Niedergerass, B. F. See British Thomson-Houston Co.

Niederstrasser, L., correction for radiation in calorimetric determinations of calorific value, B., 651.

Niehaus, H. See Benrather, A.

Nielsen, C., Higgins, J. A., and Spruth, H. C., hypnotics of the barbituric acid series, A., 510.

Nielsen, H., oil from coal, B., 652.

rotary distillation retort, (P.), B., 655*.

Nielsen, H., and Laing, B., distillation or heat treatment of carbonaceous and other materials, (P.), B., 4.

Nielsen, H. See also Laing, B.

Nielsen, N., supplying raw slurry to rotary cement-burning kilns, (P.), B., 981.

Nielsen, O., method of introducing additional agents into metallurgical baths, (P.), B., 674.

Nielsen, W. M., formation of negative ions in mercury vapour, A., 769.

Niemann, P., combustibility and structure of cokes [from brown coals], B., 1001.

Nierenstein, M., crystalline digallic acid as a precipitant, A., 41.

action of diazonium methane on cellulose, A., 154.

constitution of catechin. IX. Disintegration products of acetochin, A., 951.

use of acetic anhydride in Zelzel's method for the determination of methoxyl groups, A., 1049.

Niessen, K. F., ion charges in crystals of tetrahedral structure, A., 662.

Niethammer, A., disinfection of seeds, B., 717.

Nievodzieński, H., fluorescence of mercury vapour, A., 454.

Nigerian Products, Ltd. See Dickinson, T.

Nijhawan, S. D. See Dunncliff, H. B.

Nijhoff, G. P., and Keesom, W. H., isotherms of diatomic substances and their binary mixtures. XXXII. Isotherms of oxygen between -40° and -152.5° and pressures from 3 to 9 atm, A., 463.

Nijk, B. R., narcotic action of pure ether, A., 863.

Nikaido, G., motor fuel, (P.), B., 574.

Nikitin, N. I., influence of admixtures on the pyrophoric properties of finely divided metals. II., A., 116.

absorption of hydrogen and carbon dioxide by pyrophoric iron, nickel, and cobalt, A., 673.

absorption of ammonia by chromic, ferric, and aluminium oxides, A., 1002.

Niklas, H., Poschenrieder, H., and Hock, A., distribution of *Azotobacter* in Bavarian soils with reference to the reaction of the soils and the content of calcium carbonate and phosphoric acid, B., 377.

Niklas, H., Schwaibold, J., and Scharrer, K., iodine as a biogenic element. III. Iodine metabolism of animals, A., 638.

Niklas, H., Strobel, A., and Scharrer, K., iodine as a biogenic element. II. Administration of iodine to goats, A., 638.

Niklas, H., and Santesson, C. G., has mercuric sulphide a toxic action? A., 1274.

Nikolajev, K. See Bach, A., and Ipatiev, V. N.

Nikolajev, V. I. See Ipatiev, V. N.

Nilson, A. S., motor fuel, (P.), B., 862.

Nilson, H. A. E. See Sandberg, E. S.

Nilsson, K. T. See Weber, H. C.

Nilsson, R., and Sandberg, E., enzymic decomposition in lactic acid bacteria and yeast, A., 978.

Nilsson, R. See also Euler, H. von, and Jorpes, E.

Nimkar, V. K., and Pyman, F. L., 2-m-xylidino-5-ethoxy-4:5-dihydrothiazole, A., 183.

Nimkar, V. K. See also Forsyth, R.

Nisbet, J., mercury vapour lamps, (P.), B., 446.

Nisbet, N. See Thomson, T.

Nishikawa, K., colloid chemistry of clay and kaolin, A., 575.

Nishimura, S., takadinstase, B., 104.

Nishimura, S. See also Lüters, H.

Nishina, Y., and Ray, B., relative intensity of X-ray lines, A., 103.

Nisson, P. S. See Mandelbaum, M. R.

Nitrogen Corporation. See Clancy, J. C.

Nitsche, A. J. See Dafer, O.

Nitsche, P., improving molasses as a nutrient medium for cultivation of aroma-producing bacteria, (P.), B., 171.

Nitsche, A., condition of calcium in serum, A., 422.

volume of the proteins of serum, A., 1051.

Nitsche, A., and Freyshmidt, H. J., condition of calcium in serum, A., 1051.

Nitta, I., crystal structure of iodofomo, A., 160.

crystal structure of pentaerythritol, A., 665.

Nitschmann, R., graphic representation of electrolytic data, B., 743.

Noack, E. H., heat-resistant steel, (P.), B., 96.

Noack, K., photochemical effect of chlorophyll and its significance for carbon dioxide assimilation, A., 808.

deleterious action of smoke gases on vegetation in the light of metabolism pathology, B., 458.

Noake, W., cleaning chalk-flint stones, (P.), B., 158*.

Nobel's Explosives Co. See Brownson, H. W., Miles, F. D., and Scharff, G. E.

Noddack, W. See Egert, J.

Nodon, A., colloid condenser, B., 519.

Noé, A. See Freudenberg, K.

Noel, J. von, detecting coal tar dyes in caramel, B., 294.

Noethling, W., and Tolksdorf, S., crystal structure of hafnium, A., 563.

Nogaki, kinetics of ester hydrolysis by liver lipase, A., 541.

Nojd, H. D. See Vesterberg, K. A.

Nolan, T. J., Pratt, D. D., and Robinson, R., synthesis of pyrinium salts of anthocyanidin type. XI. Synthesis of peonidin chloride, A., 1043.

Nold, A., crystal structure [of carbon compounds], A., 460.

Noll, A., determination of dyes, B., 942.

examination of hydroaromatic alcohols and ketones, B., 994.

Noll, H., determination of molecular oxygen in aqueous solution in the presence of nitrous acid, A., 140.

separation of small quantities of calcium from large amounts of magnesium in water, B., 221.

Noller, R. C., and Adams, R., synthesis of dihydrochaulinic acid and dihydro-chaulinic acids, II., A., 597.

preparation and use of aldehyde esters formed by ozonisation of the methyl esters of unsaturated acids, A., 712.

synthesis of a homologue of chaulinic acid; Δ^2 -cyclopentenylacetic acid. VII., A., 1137.

Noller, C. R. See also Calvery, H. O.

Nomura, H., isomerisation of α -diphenylallyl alcohol to phenyl β -phenylethyl ketone, A., 70.

Nomura, H., and Tsurumi, S., pungent principles of ginger. III. Constitution of shogaol, A., 1145.

Nonhebel, G., and Hartley, H., Milner and Debye theories of strong electrolytes, A., 1006.

Nord, F. F., chemical processes in fermentations, A., 867.

Nord, F. F. See also Kendall, E. C.

Nord-deutsche Acetylen & Sauerstoffwerke A.-G., and Pommée, J., storing explosive gases in containers, (P.), B., 40.

Nord-deutsche Torfkokerei A.-G., carbonisation process for wood, peat, shale, etc., (P.), B., 223.

production of explosives, (P.), B., 613.

Nordell, C. H., separating, washing, and discharging comminuted solid material [zeolite] immersed in liquids, (P.), B., 390.

Nordheim, K. See Anzinger, A.

Nordheim, L., theory of the excitation of atoms by collisions, A., 651

Norling, K. A. P. See Svensson, K. J.

Norman, A. G. See Nanji, D. R.

Normand, A. R., Ross, J. D. M., and Henderson, E., X-ray investigation of the normal saturated dicarboxylic acids and their ethyl esters, A., 1195.

Normann, W., chemical reactions in fat hardening, B., 552.

Normann, W. See also Oelwerke Germania G.m.b.H.

Norris, F. W., pectic substances of plants. IV. Pectic substances in the juice of oranges, A., 1183.

Norris, L. C., production of volatile fatty acids in the intestinal tract of calves fed whole milk or cereal gruel, A., 196.

Norris, P. E., and Westinghouse Union Battery Co., storage-battery separator, (P.), B., 281.

Norris, W. S. G. P., cyclohexanespirocyclohexane, A., 388.

Norris, W. S. G. P. See also Birch, S. F.

Norrish, R. G. W., rôle of water in the photosynthesis of hydrogen chloride, A., 581.

Norrish, R. G. W., and Jones, G. G., valency. VII. Surface polarity and the reaction of ethylene and chlorine; effect of the adsorbed water layer, A., 226.

Norrish, R. G. W. See also Adam, N. K.

Norsk Hydro-Elektrisk Kvaestofaktieselskab, apparatus for synthetic production of ammonia from its elements, (P.), B., 51.

production of alkali silicates soluble in water, (P.), B., 329.

production of urea, (P.), B., 379.

manufacture of a substance for impregnating materials, (P.), B., 501.

treatment of acid-soluble minerals containing potassium, (P.), B., 800.

Norsk Hydro-Elektrisk Kvaestofaktieselskab. See also Axelsen, P. T., Cederberg, I. W., Farup, P., Halvorsen, B. F., Johansen, H., and Mejdel, T.

Norske Aktieselskab for Elektromek. Ind., electro-thermal process, (P.), B., 161.

[self-baking] electrodes for electric furnaces, (P.), B., 499.

Norske Aktieselskab for Elektromek. Ind. See also Ravner, O.

Norske Aktieselskab for Elektrochem. Ind. Norske Ind.-Hypotekbank, material for self-burning electrodes, (P.), B., 284.

Norske Molybdenproduktor A.-S., manufacture of molybdenum compounds [abrasives], (P.), B., 189.

Norström, E. N. See Hedvall, J. A.

North, C. E., and Milk Oil Corporation, extracting oil from milk; obtaining oil and casein from cream; producing milk oil from sour cream; emulsifying and converting fats into cream, (P.), B., 607.

North, C. E. See also Milk Oil Corporation.

North, C. O., production of a vulcanising accelerator for rubber, (P.), B., 555.

North A.-G., manufacture of silica bricks, (P.), B., 21.

Northrop, J. H., carbon dioxide production and duration of life of *Drosophila* cultures, A., 314.

"formol" titration, A., 1161.

Northrup, J. H., and Kunitz, M., combination of salts and proteins. II. Determination of the concentration of combined ions from membrane potential measurements, A., 332.

swelling and osmotic pressure of gelatin in salt solutions, A., 793.

swelling pressure of gelatin and the mechanism of swelling in water and neutral salt solutions, A., 1098.

Northrup, E. F., inductive heating, B., 283.

Northwestern Yeast Co. See Hill, C. B.

Norton, C. E. See Forrer, G. S.

Norton, F. H., laboratory kiln for obtaining high temperatures, B., 143.

thermal expansion of refractories, B., 157.

mechanism of spalling [of pottery], B., 1014.

Norton, J. T., instrument for the rapid production of Laue photographs, A., 227.

X-ray spectograph, A., 1020.

Norton, R. B. See Knobel, M.

Norton Co., and Greenwood, W. W., grinding stones for grinding wood pulp, (P.), B., 153.

Norton Co. See also Booze, M. C., and Larsum, T.

Norwood, S. M., welding of high-chromium alloys intended to meet extreme conditions, B., 950.

Nosawa, Y. See Yamamoto, H.

Nose, J. See Chikashige, M.

Nothmann, M. See Frank, E.

Nottage, M. See Hardy, W.

Novellii, A. See Guglielmelli, L.

Novello, N. J., Harrow, B., and Sherwin, C. P., methylation, A., 1171.

Novello, N. J., Miriam, S. R., and Sherwin, C. P., metabolism of aromatic acids. IX. Fate of halogen derivatives of benzoic acid in the animal body, A., 633.

Novocrete and Cement Products Co., Ltd. See Garrow, J. R.

Novocrete Co. of America Inc. See Garrow, J. R.

Novocretes Ltd., and Case, G. O., mineralising fibrous materials, (P.), B., 668.

Nowack, L., influence of small additions of lead to gold, A., 896.

Nowotchnowa, (Mle.) A. See Marchlewski, L.

Nowotny, R., wood impregnation by the Cobra process, B., 408.

Noyer, J., treatment and disposal of waste [tannery] waters, B., 958.

Noyes, A. A. See Sherrill, M. S.

Noyes, H. F., Weigel, R., and Victor Chemical Works, method and means for burning gases [containing phosphorus], (P.), B., 743.

Noyes, H. M., Falk, K. G., and Baumann, E. J., enzyme action. XXXV. Lipase actions of extracts of tissues of rabbits at different ages, A., 757.

Noyes, H. M., Lorberblatt, I., and Falk, K. G., enzyme action. XXXIV. Actions of esterases at different temperatures, A., 767.

enzyme action. XXXVIII. Ester-hydrolysing actions of the whole cell, A., 1175.

Noyes, H. M. See also Sharlit, H.

Noyes, W. A., ionisation of ethoxytrimethylammonium hydroxide, trimethyl-amine oxide, and their derivatives, A., 154.

Noyes, W. A. See also Kendall, F. E.

Noyes, W. A., jun., formation of polar compounds by photochemical reactions, A., 583.

Noyes, W. A., jun., and Wobbe, D. E., vapour pressure of anhydrous oxalic acid, A., 891.

Nowyons, A. K. See Cappellen, L.

Nüsslein, J. See Badische Anilin- & Soda-Fab.

Nugent, R. L. See Estill, H. W.

Numa, M., factors in the caustic soda absorption of cellulose and their effects on the resulting viscose, B., 9.

viscose. II. Ripening of viscose, B., 781.

Numbers, (Miss) d. H. See Rule, H. G.

Nunan, T. H. See Macbeth, A. K.

Nussbaum, J. See Bamberger, M.

Nuttall, J. M., and Williams, E. J., β -rays associated with scattered X-rays, A., 656.

ranges of secondary β -rays, A., 1191.

Nutting, C. L. See Christison, H.

Nydam, H. J. A., production of soap from waste oils and fats, (P.), B., 200.

Nyegard & Co. A./S., preparation of a stable product containing acetylalicylic acid, (P.), B., 336.

Nylén, P., organic compounds of phosphorus. II. β -Phosphinopropionic acid and γ -phosphino-n-butyric acid, A., 826.

Nyssens, P., citromolybdic acid, A., 821.

O.

Oakeshott, S. H., and Plant, S. G. P., reactions of 1-p-toluidinocyclopentane-1-carboxylic acid; carbazole synthesis, A., 843.

Oakley, H. B., origin of the charge on colloidal particles, A., 791.

anomalous flocculation of clay, A., 1204.

Oakley, H. B. See also Joseph, A. F.

Oakley, W. W., factors involved in the preheating of glass pots, with special reference to moisture control, B., 239.

Obank, L. S. See Dufton, W. J. S.

Obata, H. See Nagaoka, H.

Oberell, G. G., controlling operations of solvent-recovery plants, (P.), B., 521.

Oberell, G. G., Ballard, A. M., Alden, R. C., Utsinger, E. L., Lentz, W. R., and Chestnut and Smith Corporation, continuous treatment of natural gas gasolines, (P.), B., 352.

Oberell, G. G., Burrell, G. A., and Gasoline Recovery Corporation, recovering condensable vapours from gas mixtures, (P.), B., 864.

Oberell, G. G., and Gasoline Recovery Corporation, recovery of hydrocarbon vapours and derivatives thereof, (P.), B., 864.

Oberell, G. G. See also Burrell, G. A.

Oberhauser, F. See Manchot, W.

Oberhofer, P., specific etching agent for silicon in iron, B., 881.

Oberhofer, P., Keutmann, J., Hessenbruch, W., and Ammon, E., determination of oxygen in iron, B., 790.

Oberhofer, P., and Pivovarski, E., influence of moisture on the process of combustion, especially of coke, B., 905.

Oberle, A., recovering vanadium from petroleum hydrocarbons, (P.), B., 237.

Oberle, A., and Schofield, T. E., recovering light oils from residual products, (P.), B., 1005.

Oberlin, M., nitration of creosol [3-methoxy-*p*-cresol], acetylcreosol, and homoveratrole; substitution in complex benzene derivatives, A., 283.

Oberlin, M. See also Merck, E.

Obermaier & Co. See Wolter, H.

Obermiller, J., effect of sulphonic acid groupings in certain positions in lightening the colour of azo-dyes, A., 61.

importance of a definite regulation of atmospheric humidity in industrial textile processes, B., 312.

Obermiller, J., and Goertz, M., influence of atmospheric humidity on the absorption of moisture by textile fibres, B., 481.

[comparison of] tensile strengths of textile fibres under wet and dry conditions, B., 530.

Oberhessische Handelsges. m.b.H., and Ubbelohde, L., treating fibres, (P.), B., 782.

Oberschlesische Kokswarke & Chemische Fabr. A.-G., and Russig, F., purification of crude benzol, (P.), B., 576.

Oberschlesische Kokswarke & Chemische Fabr. A.-G., Russig, F., and Supan, A., improvement of cracked distillates, (P.), B., 231.

Oberschlesische Kokswarke & Chemische Fabr. A.-G., and Supan, A., preparation of hydrocarbons or lower phenols from low-temperature tar phenols or tar oils containing them, (P.), B., 576.

Obersohn, A., Wachtel, W., and Askenasy, P., manufacture of colloidal substances [glue] in the form of small balls or grains, (P.), B., 24.

Obersohn, A. See also Akt.-Ges. für chem. Prod. vorm. H. Scheidemandel.

Oberzimmoer, J., and Walker, L., haemoglobinogenous pigments, A., 191.

O'Brien, B., dispersion of the optical constants of mercury, A., 230.

O'Brien, J. L. See Leonard, C. S.

O'Brien, W. G., Beebe, P., and Goodyear Tire & Rubber Co., making rubberised fibrous compositions, (P.), B., 1021.

Obrutsheva, A. See Franklin, A.

O'Callaghan, J. P. See Higgins, E. B.

Ocleshaw, V. J., equilibrium in the systems aluminium sulphate-copper sulphate-water and aluminium sulphate-ferrous sulphate-water at 25°, A., 26.

Ochi, S., chemistry of bleaching powder, B., 438.

use of eldorine in the refining of sugar, B., 559.

Ochi, S., and Kotera, T., refining of sugar juice by chlorination, (P.), B., 560, 718.

Odake, S., occurrence of an amino-acid containing sulphur in the alcoholic extract of yeast, A., 203.

Oddo, B., syntheses by means of magnesylpyrroles. VII. Methylketolephthalein and its isomerides, A., 1157.

Oddo, B., and Perotti, L., syntheses by means of magnesylpyrroles. VIII. Reactions with phthalic anhydride and the constitution of indopthalone, A., 1157.

Odell, W. W., gas-making and carbonising apparatus and process, (P.), B., 910.

Odén, S., [structure of] precipitates, 111, A., 678.

peat and peat problems in Sweden, B., 82.

Odén, S., and Lindberg, S., some analyses of peat in the light of recent theories of coal formation, B., 568.

Oderberger Chem. Werke A.-G., reducing solid bodies of an extremely fine state of division and the preparation of colloidal solutions, (P.), B., 566.

Oderberger Chem. Werke A.-G. See also Chwala, A.

Odum, L. L., removing sulphur from vulcanised rubber, (P.), B., 682.

O'Donnell, F. G. See Hunt, N. R.

O'Donnell, J. F., fuel briquettes, (P.), B., 263.

O'Dwyer, M. H., hemicelluloses. IV. Hemicelluloses of beech wood, A., 983.

Oechslin, C., and Etablissement Poulen Frères, organic derivatives of tin, (P.), B., 465.

preparation of hydroxy-aliphatic arsonic acids, (P.), B., 514.

preparation of substituted aliphatic arsonic acids, (P.), B., 515.

Oechslin, C. See also Etablissement Poulen Frères.

Oeffner, A. A. See Agnew, J. B.
 Oehler, H. See I. G. Farbenind. A.-G.
 Oehme, H. See Chemische Fabrik Kalk.
 Oehring, W. See Kaufmann, H. P.
 Oehr, H. See Akt.-Ges. I. Anilin Fabrik.
 Olander, A. See Euler, H. von.
 Oelwerke Germania G.m.b.H., and Normann, W., preparation of mixed esters of fatty acids, (P.), B., 286.
 Oelwerke Stern-Sonneborn A.-G., and Vogel, H., process for bringing about physical and chemical changes in liquid or pasty dielectric carbon compounds by means of ionised gases, (P.), B., 757.
 Oeman, E., chemical activity of cellulose and its significance in sizing paper, B., 313.
 theory of resin sizing, B., 313.
 indicators for the cellulose industry, B., 531.
 Oenslager, G., changes in the rubber industry during the past fifty years, B., 538*.
 Oesterreichische Bamag-Büttner-Werke A.-G., and Jahn, R., smelting of ores of antimony, arsenic, and mercury, (P.), B., 549.
 Oesterreichische Chemische Werke G.m.b.H., heating liquids [electrically], (P.), B., 591.
 Oestlund, V. C., briquetting ore concentrates, especially iron ore, (P.), B., 883.
 Oexmann, H., manufacture of durable earthenware, (P.), B., 918.
 Offord, H. R. See Clark, R. H.
 Ofner, A. See Gränacher, A., and Pfau, A. S.
 Ofner, R., defects of Fehling's solution, B., 928.
 Ogait, A. See Meierwein, H.
 Ogawa, I., adsorption and electrical properties of various charcoals, A., 239.
 adsorptive powers of charcoal, A., 898.
 Ogawa, W., Nemoto, C., and Kaneko, S., synthesis of galena crystals, B., 946.
 Ogburn, S. C., *jun.*, new analytical reactions of the platinum metals, A., 1117.
 qualitative separation of the platinum metals, A., 1117.
 Odgen, H. See Green, E. W.
 Odgen, S. A., manufacture of a derivative of cellulose, (P.), B., 975.
 Ogg, W. A., smelting ores of volatile metals; smelting volatile metals, (P.), B., 369.
 O'Hara, T., determination of glycogen, A., 981.
 O'Hara, B. M. See Zeller, G. A.
 Ohashi, S., single-crystal tungsten wire and the theory of recrystallisation, A., 563.
 Ohio Brass Co. See Austin, A. O.
 Ohle, H., [with Koller, I., and Berend, G.], acetone [isopropylidene] compounds of sugars and their derivatives. III. Constitution of β -diisopropylidene-fructose, A., 150.
 Ohle, H., and Berend, G., acetone [isopropylidene] compounds of sugars and their derivatives. IV. Constitution of diacetonegalactose [galactose diisopropylidene ether], A., 150.
 acetone [diisopropylidene] compounds of sugars and their derivatives. V. Constitution of diacetomannose [mannose diisopropylidene ether], A., 150.
 Ohle, H., and Dickhäuser, E., acetone [diisopropylidene] compounds of sugars and their derivatives. VI. Acyl derivatives of monoacetoneglucosid [glucose isopropylidene ether], A., 151.
 Ohle, H., and Spencker, K., acetone [diisopropylidene] compounds of sugars and their derivatives. VII. Constitution of some monoacyl derivatives of monoacetoneglucosid [glucosid isopropylidene ether], and the ring structure of dextrose, A., 1126.
 Ohle, H. See also Hintzelmann, U.
 Ohse, W. See Steinkopf, W.
 Oikawa, S., symmolsulphuric acid, I., A., 522.
 Okamoto, H., liver and spleen pigments of the toad, A., 857.
 Okey, R., and Erikson, S. E., metabolism of women. 11. Cyclic variations in uric acid and non-protein nitrogen of blood, A., 973.
 Okie, F. G. See Minnesota Mining and Manuf. Co.
 Okinaka, C. See Komatsu, S.
 Okochi, M., Hanaoka, M., and Zaidan Hojin Rikagaku Kenkyujo, electrodeposition of iron from minerals, (P.), B., 547.
 Okuda, Y., determination of cystine and cysteine, A., 190.
 presence of cysteine group in protein molecules, A., 1163.
 Olcott, C. A., and Hepworth Co., S. S., centrifugal machine, (P.), B., 728.
 Oldenberg, O., excitement of fluorescence by short-wave ultra-violet light, A., 992.
 Oldham, J. W. H., transformations of the sugar nitrates, A., 151.
 Oldham, J. W. H. See also Irvine, (Sir) J. C.
 Olin, H. L., hydrolysis of sulphur monochloride, A., 256.
 Oliver, E. L., and Borden, J. F., filter, (P.), B., 728.
 Oliver, H. See Backhouse, T. N.
 Oliver, J., and Smith, P., kinetics of agglutination of red blood-cell suspensions, A., 243.
 Oliver, T. C. See Hechenbleikner, I.
 Oliveri-Mandalà, E., solubility effects. I. Temperature coefficients, A., 237.
 solubility effects. II. Molecular solubility coefficients, A., 237.
 Oliveri-Mandalà, E., and Carli, E., solubility effects. III. Quinine hydrochloride and antipyrine, A., 238.
 Oliveri-Mandalà, E., and Forni, P., solubility effects. IV. Acetanilide-antipyrene, acetanilide-pyramidone, A., 238.
 Oliver, S. C. J., dibromination of *aceto-m*-toluidide, A., 161.
 hydrolysis of substituted benzyl chlorides and the theory of steric hindrance, A., 511.
 Olivier, S. C. J., and Berger, G., hydrolysis of substituted benzyl chlorides and the theory of induced alternate polarities, A., 805.
 is the effect produced by a substituent in a benzoid ring transmitted by the carbon chain, as the theory of induced alternate polarities requires? A., 1239.
 Ollard, E. A., and Metropolitan-Vickers Electrical Co., Ltd., electrodeposition of nickel, (P.), B., 590.
 Ollard, E. F. See Bradley, A. J.
 Ollivier, J. See Loepere, M.
 Olshausen, S. von, structure investigations by the Debye-Scherrer method, A., 228.
 Olsen, O. R., and Torkildsen, B., manufacture of phosphatic fertilisers, (P.), B., 991.
 Olson, A. R., mechanism of ammonia synthesis in low-voltage arcs, A., 658.
 Olson, A. R., and Meyers, C. H., polymerisation and hydrogenation of ethylene by means of excited mercury atoms, A., 364.
 Olson, G. A., and St. John, J. L., nutritive value of wheat. I. Effect of variation of sodium in a wheat ration, A., 197.
 Olson, H., dependence of the rate of alkaline hydrolysis on the constitution of the alcohol. III. Temperature coefficients, A., 33.
 Olsson, H. See also Smith, I.

Olszewski, B., comparative tests on the sensitiveness of some usual reagents for methyl alcohol, B., 849.
 Olszewski, W., apparatus for measuring turbidity and colour of water, B., 998.
 Oman, E., distillation of hydrochloric acid and nitric acid, A., 235.
 aluminium resinate in the sizing of paper, B., 912.
 O'Neill, F. I. See McCullough, M.
 O'Neill, H., deformation lines in large and small crystals of ferrite, A., 564, 1085*.
 Ongkiahong, B. L. See Jorissen, W. P.
 Onnes, H. K., superconductors, A., 891.
 Onnes, H. K., Bequaert, J., and De Haas, W. J., magnetic rotatory power of some paramagnetic minerals at very low temperatures, A., 14.
 Onnes, H. K., Sealso Agt. F. P. G. A. J. van, Bequaert, J., Crommelin, C. A., De Haas, W. J., Keesom, W. H., Sizoo, G. T., Urk, A. T. van, and Woltjer, H. R.
 Ono, A., X-ray examination of the inner structure of strained metals. IV. α -iron plastically strained in extension, compression, and torsion, A., 112.
 X-ray examination of the inner structure of strained metals. V. Mechanism of crystal rearrangement and the cause of strain-hardening, A., 112.
 Ono, K., camphor oils. III. Action of oxalic acid on terpin hydrate, A., 72.
 camphor oils. IV. Reaction of Japanese acid clay to terpin hydrate and terpineol, A., 72.
 Ono, Y., oxidation of a mixed solution of two reducing agents, A., 926.
 Onohara, K., effect of mineral content of food on fat content of body, A., 197.
 effect of insulin on the blood-fat level in dogs on a vitamin-free diet, A., 206.
 effect of insulin treatment and nutritional conditions on the fat content of rats on vitamin-free diets, A., 206.
 Onsager, L., theory of electrolytes, A., 906.
 Onslow, (Mrs.) M. W., and Robinson, M. E., oxidising enzymes. IX. Mechanism of plant oxydases, A., 1176.
 Ono, K. H. See Glancy, W. E.
 Oparin, A. I. See Baksh, A. N.
 Oparina, (Mle.) M. P., products of the condensation of isovaleraldehyde with ammonia in presence of aluminium oxide as catalyst, A., 844.
 Oparina, O. P. See Tschitschibabin, A. E.
 Opderbeck, E. See Neuhaus, W.
 Open-Hearth Combustion Co., and Naismith, S., construction of open-hearth furnace walls, (P.), B., 792*.
 Optozky, V. See Petrenko-Kritschenko, P.
 Oppé, A., manufacture of solid mixtures of alkali hypochlorite and alkali chlorides, (P.), B., 1013.
 Oppel, W. W. See Galvialo, M. J.
 Oppenheim, R., and Société Anonyme le Carbone, electric battery, (P.), B., 332*.
 protecting gas-absorbing substances [in electric cells] from penetration by liquid, (P.), B., 332*.
 galvanic battery, (P.), B., 677*.
 rendering a porous powder [used in an electric cell] impermeable to liquids, (P.), B., 677*.
 Oppenheimer, C. See Neuberg, C.
 Oppenheimer, J. R., quantum theory of vibration-rotation bands, A., 991.
 Orcel, J., chlorite in Transvaal marlomite, A., 42.
 [schalite], A., 708.
 classification of the chlorites, A., 933.
 thermal analysis of chlorites, A., 1119.
 Ore Roasting Development Co. See Fogh, C. S.
 Orékhov, A., and Tiffeneau, M., transformation of trisubstituted aldehydes into disubstituted ketones, A., 171.
 hydrobenzoin transformation. II. *s*-Phenylanisyl glycol (*p*-methoxyhydrobenzoin), A., 172.
 Orkla Grubeaktiebolag, depositing copper from solutions, (P.), B., 952.
 Orkla Grubeaktiebolag. See also Pedersen, H.
 Orlov, E. I., nitration of xylene by dilute nitric acid (d 1.35—1.29) in presence of mercury, A., 1130.
 pyrogenic oxidation of turpentine in presence of contact copper [copper gauze], B., 768.
 Orlov, J. See Ipatiev, V. N.
 Orlov, N. See Ipatiev, V. N.
 Orlovski, T., rhythmic reactions of mercury salts in gelatin jellies, A., 675.
 Orlovski, T. See also Galecki, A.
 Ormandy, W. R., and Craven, E. C., determination of the molecular weight of petrol, B., 227.
 determination of unsaturated constituents in petroleum spirit, B., 227.
 free sulphur in benzol, B., 232.
 examination of spirit produced by the hydrogenation of coal, B., 393.
 action of sulphuric acid on petrol, B., 393.
 effect of water on aniline points [of hydrocarbons], B., 395.
 Ormandy, W. R., and Peake, A. M., treatment of leucite and other similar complex silicates containing potassium, (P.), B., 52.
 Ormerod, E. See Bamberger, E.
 Ormont, B., iodometric determination of arsenic acid, A., 375.
 electrochemical preparation of lead arsenates and arsenites, A., 919.
 Orndorff, W. R., and Cornwell, R. T. K., thymolsulphonephthalain, the intermediate acid, 4'-hydroxy-3'-isopropyl-6'-methylbenzophenone-2-sulphonic acid, and some of their derivatives, A., 610.
 Orndorff, W. R., and Fuchs, N., pyrogallolsulphonephthalain, sulphonegallein, 2:3:4-trihydroxybenzophenone-sulphonic acid (the intermediate acid), and some of their derivatives, A., 949.
 Orndorff, W. R., Gibbs, R. C., and McNulty, (Miss) S. A., absorption spectra of benzaurin, A., 60.
 absorption spectra of phenolphthalein, isophenolphthalein, and of diphenylphthalide, A., 884.
 Orndorff, W. R., Gibbs, R. C., and Shapiro, C. V., absorption spectra of resorcinolbenzene, A., 733.
 Orndorff, W. R., and Johnson, C. H., 3-hydroxytetrachlorofluoruran and 3:4-dihydroxytetrachlorofluoruran and some of their derivatives, A., 1043.
 Orndorff, W. R., and Parsons, T., α -hydroxybenzoyl- α -tetrachlorobenzoic acid, isophenol-tetrachlorophthalain, and some of their derivatives, A., 290.
 Orndorff, W. R., and Purdy, A. C., *m*-cresolsulphonephthalain, 3:6-dimethylsulphonofluoruran, and some of their derivatives, A., 1036.
 Orndorff, W. R., and Schade, C., 3:1:5:6-tetrachloro-2'-hydroxy-3'-methylbenzoylbenzoic acid, *iso*- α -cresol-tetrachlorophthalain, and some of their derivatives, A., 519.
 Orndorff, W. R. See also Dennis, L. M.
 Ornstein, G., chlorine treatment of water and sewage, B., 854.
 Ornstein, L. S., Bors's dipole theory of anisotropic liquids, A., 225.
 influence of radiation on chemical reactions, A., 585*.

Orr, C. See British Thomson-Houston Co., Ltd.
 Orr, J. B., mineral elements in animal nutrition, A., 129.
 Orr, J. B. See also Elliott, W.
 Orr, M. D. See Karczag, L.
 Orr, W. J., Holt, L. E., jun., Wilkins, L., and Boone, F. H., relation of calcium and phosphorus in the diet to the absorption of these elements from the intestine, A., 862.
 Ort, J. M. See Kendall, E. C.
 Orthmann, A. C., machine for preparing leather samples for analysis, I., 138.
 acidity of chrome-tanned leather, B., 206.
 Orthmann, W., damping of mercury resonance lines by collision, A., 224.
 Orthmann, W., and Pringsheim, P., extinction of the mercury resonance radiation in mercury vapour at high pressure, A., 334.
 Orthmann, W. See also Nernst, W.
 Ortner, G., [manganese] doublet K_{β_1} , A., 650.
 Osaka, Y., and Ando, K., equilibria in the system mercuric chloride, ammonium chloride, potassium chloride, and water at 25°, A., 26.
 Osaka, Y., and Inouye, R., the system water and the nitrates and sulphates of ammonium and potassium at 25°, A., 126.
 Osann, B., [formation of] graphite scum in cast iron, B., 919.
 Osawa, A., relation between lattice constant and density of iron-nickel alloys, A., 561, 1085*.
 Osawa, N. See Goto, K.
 Osborne, T. B., and Mendel, L. B., relation of rate of growth to diet. I., A., 1180.
 Osborne, W. A., action of carbon dioxide on haemoglobin, A., 1267.
 Osborne, W. M. See Gregor, W. D.
 Osburn, D. F. See Morgan, A. F.
 Oser, B. L., and Karr, W. G., lipoid partition in blood in health and disease, A., 317.
 correction of Folin-Wu blood-sugar values, A., 413.
 Oser, B. L. See also Meeker, H. G.
 Oshima, K., and Kondo, R., detection of methylpentosan, A., 1164.
 determination of pentosan and methylpentosan, A., 1161.
 Oshima, G., and Ishibashi, K., basic compounds in low-temperature tar, II., 1006.
 Ost, H., cellulose and cellotriose, A., 1127.
 Osterberg, A. E. See Kendall, E. C.
 Osterhout, W. J. V., and Dorcas, M. J., penetration of carbon dioxide into living protoplasm, A., 204.
 Ostroga, F. M., annealing, quenching, and reheating of some industrial nickel-brasses, B., 161.
 Ostromislenski, I. See Naugatuck Chemical Co.
 Ostwald, Walter, "metyl" and "matalin"; iron carbonyl as antiknocking agent, B., 571.
 fractionation number [of motor fuels], B., 810.
 Ostwald, Wolfgang, theory of δ -resengang rings, A., 1202.
 Röntgen effect of stretched gels, especially of caoutchouc, B., 956.
 Ostwald, Wolfgang, and Auerbach, R., viscosity of colloidal solutions in the structural, laminar, and turbulence regions. V. Velocity function of viscosity of disperse systems, A., 470.
 polychromism of sulphur, A., 575.
 Ostwald, Wolfgang, and Mertens, M., colloidal properties of complex mercury derivatives of sulphosalicylic acid, A., 1097.
 Ostwald, Wolfgang, and Steiner, A., colloid chemistry of humic acid peat, B., 34.
 O'Sullivan, J. B., application of the quinhydrone electrode to the measurement of μ_H values in solutions containing copper ions and other bivalent ions, A., 274*.
 Otani, B., silumin and its structure, B., 831.
 Otis, S., Herren, W. T., and Nat. Boiler Washing Co. of Illinois, metal-coated articles and process of making, (P.), B., 881.
 Otremska, A., microscopical investigation of opacity phenomena in enamel frits, B., 642.
 Ottsuka, O., spectra of rubidium and krypton, A., 651.
 Otsuka, S. See Weilmann, P. P. von.
 Ott, E., X-ray investigation of cellulose and lichenin, A., 387.
 X-ray investigations of highly polymerised organic substances to determine the limiting value of their molecular weights, A., 160.
 crystalline character of cellulose acetate, A., 563.
 synthesis of adrenaline; [preparation of pyrocatechol chloroacetates], A., 722.
 cellulose acetate and nitrate, A., 782.
 X-ray investigation of albumin crystals, A., 1054.
 new forms of gas analysis apparatus, B., 474.
 molecular magnitude of caoutchouc and gutta-percha, B., 681.
 Ott, H., structure of carborundum (SiC), A., 339.
 crystal structure of carborundum. I. Modification II. II. Modification I. III. Modification III., A., 562.
 Ott, M. See Sachs, G.
 Otte, W., and Weiss, H., comparative crude fibre determinations in spices, B., 690.
 Ottenberg, R., and Stanbuck, F. A., isoelectric zone of typhoid agglutinin, A., 310.
 Ottenstein, B. See Gubler, A.
 Otterbacher, T. J. See Hollingshead, T. E.
 Otteson, A. J. A., direct cooling [refrigeration] of goods [foods], (P.), B., 27*.
 Otto, C., cobalt aluminate test for aluminium, A., 815.
 Otto, G. See Pringsheim, H.
 Otto, J. See Holborn, L.
 Otto, M. P. See Crespi, E.
 Otto, S., and Jankus, J. C., evaporators for refrigerating apparatus, (P.), B., 968.
 Otto, W., and Nederlandsche Technische Handel Maats. "Giro," resistance element, (P.), B., 416.
 Otto & Co., C. See Naaml. Vennoots. Silica en Oevenbouw Mij.
 Otto & Sons, A. T. See Harter, H., and Kihl, H.
 Ottolenghi, M., agglomeration and briquetting of finely-divided ferriferous material, B., 790.
 Oumnov. See Umnova.
 Overley, F. L. See Neller, J. R.
 Overmyer, C. J., synthesis of substitution derivatives of indigotin. I. o-Nitrobenzoyletic acid and related compounds, A., 415.
 Owe, A. W., determination of tin and lead in preserves and containers, B., 606.
 Owen, B. J., artificial drying of crops, (P.), B., 160, 614.
 dehydration of the sugar beet (De Vecchi process), B., 961.
 Owen, E. A., and Preston, G. D., effect of rolling on the crystal structure of aluminium, A., 340.
 X-ray tube with detachable electrodes suitable for crystal analysis, A., 1223.
 Owen, G. See Lowry, T. M.
 Owen, H. F., dehydrating oil, (P.), B., 6.

Owen, W. L., prevention of the deterioration of raw sugars by inoculation with *Torula*, B., 559.
 preservation of [white] sugar, (P.), B., 561.
 Owen, W. L., and Bennett, N., fermentation of bagasse in relation to the yield of industrial alcohol, B., 962.
 Owens, J. S., condensation of water from the air on hygroscopic crystals, A., 494.
 measuring the smoke pollution of city air, B., 221.
 Owens, W. M. See Heilbron, I. M.
 Ow-Eschingen, M. See Pfiffner, E.
 Oxford, A. E., derivatives of guaiacol and veratrole substituted in the 3- and 6-positions, A., 1035.
 Oxford, A. E., and Robinson, R., relative directive powers of groups of the form RO and $\text{RR}'\text{N}$ in aromatic substitution. II. Nitration of some 2-benzyl-oxyanisoles substituted in the benzyl group, A., 397.
 Oxford, A. E. See also Allan, J.
 Ozaki, J., relative nutritional value of synthetic fats, A., 1272.
 nutritive value of synthetic fats containing fatty acids of an odd number of carbon atoms, B., 930.
 Ozawa, T., wood pulp. III. Properties of the purified pulp, B., 626.
 Ozonohochfrequenz G.m.b.H. See Starke, A.
 Ozonid Corporation. See Ramage, A. S.

P.

Paal, C., and Di Pol, L., colloidal bismuth hydroxide, A., 675.
 colloidal bismuth, A., 676.
 Paal, C., and Posthke, W., [with Pross, A.], catalytic fission and oxidation of formic acid, A., 936.
 Pachlornik, F., preparation of aspartic acid from asparagine, B., 298.
 precipitation of acids during defecation and carbonatation, B., 559.
 Pacific Coast Steel Co. See Crook, W. J.
 Pacific Lumber Co. See Humboldt, E. S.
 Pacific R. and H. Chemical Corporation. See Brown, M. J., and Walker, M.
 Pack, D. A., effect of moisture on the loss of sugar from beets in storage, B., 960.
 Packard Motor Car Co. See De May, J.
 Packards & James Fison (Thefford) Ltd. See Mills, W. G.
 Packer, J., and Rivett, A. C. D., binary system barium iodide-water, A., 682.
 Packer, J., and Thorpe, J. F., glutamic acids. XIX. A consequence of mobility, A., 820.
 Packer, J. See also Denham, H. G., and Thwaites, R. E.
 Pacz, A., [foundry] metal composition, (P.), B., 62.
 method of producing alloys, (P.), B., 64*.
 deoxidising metals and alloys, (P.), B., 97.
 increasing the fluidity of molten metal [iron and steel], (P.), B., 984.
 Pacz, A., and Aluminum Co. of America, aluminium alloy, (P.), B., 369, 881.
 composition of matter; [die-casting alloy], (P.), B., 369.
 aluminium-silicon alloy, (P.), B., 881.
 Pacz, A., and General Electric Co., Ltd., manufacture of iron-boron alloys, (P.), B., 18*.
 Padelf, H. T., tunnel ovens for ceramic and chemical purposes, (P.), B., 275.
 channel oven for ceramic and chemical purposes, (P.), B., 489*.
 Paderi, C., glycogen content of the liver and muscles in cases of arsenic poisoning, A., 756.
 physiological action of 1:3:7:9-tetramethylxanthine compared with that of caffeine, A., 974.
 Padgett, F. W., Hessey, D. G., and Henriksen, A., [paraffin] wax crystallisation, B., 811.
 Padova, M., transition compounds between salts and metallic alloys, A., 226.
 yield of photochemical reactions with complex light in comparison with that obtained with the component lights. I., A., 684.
 Padova, M., and Vita, N., yield of photochemical reactions with complex light in comparison with that obtained with the component lights. II. and III., A., 808, 1014.
 Padova, R. See Bamberger, E.
 Padovani, C. See Terni, A.
 Paeschke, S. See Neber, P. W.
 Paffrath, H. See Alderhalden, E.
 Page, A. R., hardening and tempering of high-speed steel, B., 492, 883*.
 Page, C. M., and Fahyan, G., apparatus for cracking and distillation of petroleum, (P.), B., 864.
 cracking of [hydrocarbon] oils, (P.), B., 1005.
 Page, H. J., and Williams, W., effect of flooding with sea-water on the fertility of the soil, B., 1023.
 Page, I. H., and Coryllos, P., ethylisoamylbarbituric acid (amytal); its use as an intravenous anaesthetic, A., 756.
 Page, M. E., [aluminium] alloy, (P.), B., 63.
 Page, H., determination of ascaridole in chenopodium oil, B., 462.
 Pagliari, E. See Finzi, C.
 Pagliarulo, M. L., rotatory and refractive dispersions of aqueous solutions of d-tartaric acid, A., 1201.
 Pahle, G. See Tröger, J.
 Paine, H. S., and Balch, R. T., nature and distribution of the non-sugars affecting the quality of white beet granulated sugars, B., 961.
 Paine, H. S., Walton, C. F., jun., and Birckner, V., manufacture of cane-sugar [from molasses], (P.), B., 337.
 Paine, H. S. See also Badolat, J. S., and Balch, R. T.
 Paiseau, J., refining process for pearl essence, (P.), B., 323*, 665.
 Pak, C., passage of chemical substances from the vascular system into the tissues, A., 430.
 Palacie, C., and Vassar, H., minerals of the Keweenawan copper deposits: pumpellyite, sericitic, saponite, A., 709.
 Palacin, N. F. O., combustible gas mixture containing nitrogen, (P.), B., 309.
 Palacios, J., theory of light emission in the Rutherford-Bohr atom, A., 451.
 Palacios, J. See also Carrera, B.
 Palit, C. C., and Dhar, N. R., catalytic and induced oxidation of some carbohydrates, uric acid, and inorganic substances, A., 822.
 action of nitric acid on metals in the presence of catalysts, A., 915.
 Palkin, S., and Wales, H., dyes from the alkaloids of ipecacuanha, A., 531.
 Palkin, S. See also Wales, H., and Watkins, H. R.
 Palikine, A. P. See Karavaev, N. L.
 Palkon, M. See Sejvil, J.
 Palladin, A., connexion between creatine and carbohydrate metabolism, A., 90.

Palladin, A., and Palladin, L., the spleen in relation to metabolism. I. Effect of removal of the spleen on nitrogen and creatinine excretion, A., 90.

Palladin, L. See Palladin, A.

Palladin, V., Platischenkski, P., and Elladi, E., plant reductases, A., 95.

Pallaut, F. See Fonrobert, F.

Palm, A. See Küster, W.

Palmaer, W., theory of and investigations into the corrosion of metals, B., 589.

Palmer, C. W. See British Celanese, Ltd.

Palmer, G. D., and Reid, E. E., influence of sulphur on the colour of azo-dyes, A., 614.

Palmer, H. F., and Wallace, G. H., improvement in MacMullin's automatic apparatus for determining the m. p. of organic compounds, A., 1021.

Palmer, L. S., and Richardson, G. A., colloid chemistry of rennin coagulation, A., 905.

Palmer, L. S. See also Kennedy, C.

Palmer, R. See British Thomson-Houston Co., Ltd.

Palmer, R. C., and Newport Co., dehydrating pine oil, (P.), B., 797.

Palmer, W. C., adsorptive equilibria of binary gaseous mixtures, A., 239.

Palmer, W. W., titration of organic acids in urine, A., 859.

Palohaimo, L., use of acid hydrolysis in the determination of lignin, B., 152.

Palser, J. See Lloyd, J. H.

Palumbo, E. L., optical and electrical constants of sucrose, A., 784.

Pamer, H. See Weissenberger, G.

Pan, L. C. See Fink, C. G.

Paneth, F., amphoteric ionisation of polonium and bismuth, A., 130.

Paneth, F., and Peters, K., transformation of hydrogen into helium, A., 1077. separation of helium from gas mixtures, (P.), B., 916.

Paneth, F., and Rabinovitch, E., [group of volatile hydrolydes], A., 34.

Panicker, P. M. B., Rao, B. S., and Simonsen, J. L., essential oil from the rhizomes of *Kaempferia galanga*, B., 1028.

Pantin, C. F. A. See Atkins, W. R. G.

Pantschenko, G. A. See Tananaev, N. A.

Paolini, V., chemico-physical investigations on certain acid phthalates of terpenic alcohols, A., 175.

isomeric thujones (tanacetones); *d*-*a*-thujones, A., 175.

isomeric terpineols and resolution of *a*-terpineol into optical antipodes, A., 298.

isomeric *a*-terpineols; active terpineols from active pinenes, A., 298.

isomeric carvomenthols from carvacrol, A., 298.

Pape, C. See Tröger, J.

Pape, H., distillation of coal, (P.), B., 862.

Pape, H. See also Seidenchsnur, F.

Papendieck, A., porphyrins from blood pigments. III., A., 312. porphyrins from blood pigments. IV. Constitution of porphyrins, A., 631.

Papendieck, A. See also Schumm, O.

Papillon, P., recovery of phenols and pyridine bases from tar distillation products or other mixtures (P.), B., 232.

Pappée, M., treatment of crude potassium salts, B., 437.

Paras, E. M., blood in leprosy. I. Non-protein nitrogenous substances, sugar, and chlorine, A., 1064.

Paraschitschuk, influence of feeding coconut oil-cake [to cows] on the Polenske value [of the butter], B., 73.

Parenzani, F., process and apparatus for purifying clay, etc., (P.), B., 917.

Paris, A. See Freudlich, H.

Paris, G., action of alcoholic zymase, A., 323.

Pariselle, pyridine and quinoline tartrates, A., 957.

Parish, W. F., power and the viscosity of oil, B., 620.

Parisi, E., nitrogenous substances of beet molasses, B., 169.

denitrification in oxidising media, B., 641.

nitrification and denitrification in oxidising media, B., 762.

Park, B., bismuthate method for manganese, A., 704.

Park, C. R., accelerated ageing tests [for rubber], B., 452.

Parke, Davis & Co., and Clover, A. M., preparation of dibromobarbituric acid, (P.), B., 173.

Parker, A., combined apparatus for gas-making and coal or fuel carbonisation, (P.), B., 861.

Parker, A. D., and American Briquet Co., briquette, (P.), B., 117.

Parker, F. W., and Pate, W. W., base exchange in soil colloids and the availability of exchangeable calcium in different soils, B., 892.

Parker, F. W., and Tidmore, J. W., influence of lime and phosphatic fertilisers on the phosphorus content of the soil solution and of soil extracts, B., 763.

Parker, G. H., carbon dioxide excreted in one minute by one cm. of nerve fibre, A., 190.

Parker, H. C., electrical conductivity and hydrogen-ion control of waste [sewage] disposal, B., 469.

Parker, H. C., and Greer, W. N., hydrogen-ion control of nickel-plating baths with the quilihydron electrode, B., 246.

Parker, J. A., electro-deposition of metals on wire or narrow strip, (P.), B., 675*.

Parker, J. G., and Terrell, J. T., tests with various hide powders using a buffer solution of p_H 4-6, B., 69.

Parker, L. D. See Vickers, Ltd.

Parker, O. J., low-temperature carbonisation: the economic side, B., 937.

Parker, R. G., and Jackman, D. N., effects of humidity on the properties of fabrics, with special reference to the control of humidity during strength tests, B., 530.

Parker, R. G. See also British Launderers' Research Assoc.

Parker, T. G., and Winch, L., extraction of sumac for analysis; comparison of various methods, B., 989.

Parker, T. W., treatment of clay, (P.), B., 128.

Parkes, D. W. See Butler, T. H.

Parkes, G. D. See Chataway, F. D.

Parkin, M., and Turner, W. E. S., devitrification of soda-lime-silica glasses containing excessive amounts of arsenious oxide, B., 585.

influence of moisture on the mixing of batches for soda-lime-silica glasses, B., 745.

Parkin, M. See also Firth, E. M.

Parks, G. S., and Anderson, C. T., thermal data on organic compounds. III. Heat capacities, entropies, and free energies of *tert*-butyl alcohol, mannitol, erythritol, and *n*-butyric acid, A., 784.

Parks, G. S., and Kelley, K. K., heat capacities of some metallic oxides, A., 232.

heat capacity of calcium silicate [pseudowollastonite], A., 1087.

Parks, G. S. See also Maier, C. G.

Parmele, C. W., and Westman, A. E. R., investigation of checker bricks for water-gas carburettors, B., 632.

Parnas, J. K., and Klisiecki, A., ammonia content of, and ammonia formation in, the blood. IV. Is ammonia present in the circulating blood? A., 536.

ammonia content of, and ammonia formation in blood. VI. Ammonia content of circulating blood and the localisation of ammonia formation and disappearance in rabbits, A., 855.

Parnas, J. K. See also Mozolovski, V.

Parodi-Delfino, L., gelatinising nitrocellulose in nitro-compound powders and celluloid, (P.), B., 693.

Parr, S. W., constitution of coal, B., 697.

deterioration and spontaneous combustion of coal in storage, B., 811*.

recording gas colorimeter of the flow type, B., 1002.

Parr, S. W., and Coons, C. C., carbon dioxide as an index of critical oxidation temperature for coal in storage, B., 811*.

Parr, S. W., and Milner, R. T., oxidation of coal at storage temperatures, B., 811*.

Parr, S. W., and Straub, F. G., caustic embrittlement of steel, B., 1016.

Parr, S. W. See also Vandaveer, F. E.

Parravano, N., and Malquori, G., equilibria in the reduction of cuprous chloride and lead chloride by hydrogen, A., 799.

thermal dissociation of some chloroaurates, A., 800.

Parrett, A. N., and Lowy, A., catalytic reduction of *a*-nitronaphthalene to *a*-naphthylamine, A., 512.

Parrish, E., history and composition of low-temperature tar, B., 1006.

Parrish, E., and Rowe, F. M., tar from low-temperature carbonisation of coal, B., 655.

Parrish, J. R., recent work on the measurement and industrial importance of particle size, B., 935.

Parshin, A., Syzran asphalts, B., 475.

Parsons, C. E., and Metals Research Corporation, making glass, (P.), B., 879.

Parsons, C. E. See also Strong, W. E. S.

Parsons, C. S., concentration of Lake George antimony ores, B., 672.

concentration of lead-zinc ores of Eastern Canada, B., 672.

Parsons, C. S. See also Timms, W. B.

Parsons, L. W., and Taylor, G. R., lubricating value as related to certain physical and chemical properties of oils, B., 620.

Parsons, L. W. See also Wilson, R. E.

Parsons, T. See Orndorff, W. R.

Parsons, T. R., use of low temperatures in the preparation of pure proteins, A., 643.

Partington, J. R., oxidation of ammonia, A., 487, 696.

specific heats of hydrogen cyanide, A., 784.

Partington, J. R., and Anfilogoff, N. L., electric vacuum furnace, A., 41, 377*.

Partington, J. R., and Rule, J. F. J., dielectric constants of benzene solutions, A., 661.

Partington, J. R., and Tweedy, S. K., isomeric chromic chloride hexahydrates, A., 343.

hydrates of chromic nitrate, A., 697.

Partington, J. R. See also King, F. E., and Mayes, H. A.

Partos, A., citrylamin, A., 853.

Partridge, F. M., and Scarritt, E. W., method of producing chlorine, (P.), B., 127.

Partridge, J. H., magnetic and electrical properties of cast iron, B., 162*.

Partridge, W. V., detection of apple pulp in jam, B., 719.

Pascal, P., magnetic properties of the carbonyl radical, A., 227.

structure of pyruvic acid, A., 597.

synthetic manufacture of alcohol and acetic acid [and acetone], B., 767.

Paschen, F., series-limits and molecular fields, A., 765.

Pascual Villa, J., and Cerezo, J., benzylbenzoin [benzoylphenylbenzylcarbinol] A., 1041.

Passage, S. See Blanck, E.

Passeker, R., apparatus for galvanising iron plates by the lead-zinc process, (P.), B., 445*.

Passerini, M., carbylamin. XIII. Reaction of phenylcarbylamine with pernitrosomethone, A., 175.

polymerisation of mixtures of optically active organic acids and aldehydes or ketones, A., 226.

conversion of oximes into nitriles by means of potassium cyanide, A., 726.

carbylamin. XIV. Reaction of phenylcarbylamine with 2-hydroxy-1-naphthaldehyde, A., 952.

Pastak, I. A., constitution of aromatic compounds and their physical and chemical properties. III., IV., and V., A., 340.

microscopy: molecular weight determination in trinitrotoluene, A., 349.

polynitrotolbenzene, A., 392.

2:2:4:4:6:6'-hexanitro- $\alpha\beta$ -tripheylpropane and its derivatives, A., 392.

Pastak, I. A. See also Vesely, V.

Pastureau, J., and Bader, chlorohydrins of some $\alpha\beta$ -unsaturated acetone derivatives, A., 382.

preparation of the chlorohydrins of mesityl oxide, A., 1227.

Pastureau, J., and Zamenhof, preparation of propylidene- and isopropylidene-acetone with the intermediate formation of the corresponding ketonic alcohols, A., 272.

some derivatives of Δ^2 -hexen- β -one and ζ -methyl- Δ^2 -hepten- β -one, A., 1227.

Patart, G. L. E., synthetic manufacture of liquid ammonia, (P.), B., 52.

apparatus for effecting recovery of heat and water vapour in the catalytic manufacture of hydrogen by the action of water vapour upon carbon monoxide, (P.), B., 156.

separation of the several components of a gaseous mixture, (P.), B., 303.

apparatus for effecting catalytic gas syntheses under pressure, (P.), B., 346.

catalysts for the hydrogenation of oxides of carbon, (P.), B., 351.

manufacture of water-gas, (P.), B., 396.

manufacture of calcium carbide, coke, and synthetic products [methyl alcohol], (P.), B., 812.

Pate, W. W., influence of the amount and nature of the replaceable base upon the heat of wetting of soils and soil colloids, B., 102.

Pate, W. W. See also Parker, F. W.

Patel, C. K., Iyer, S. N., Sudborough, J. J., and Watson, H. E., fat from *Saladora oleoides*, B., 1019.

Paten-Treuhand Gesellschaft für Elektrische Glühlampen, and Nachod, H., red glazes and enamels, (P.), B., 275.

Paten-Treuhand Gesellschaft für Elektrische Glühlampen. See also Gen. Electric Co., Ltd.

Pater, B., essential oil of *Bifora radians*, M.B., B., 216.

Paterson, H. A. See Pincus, J. B., and Smith, R. C.

Paterson, W., filtering apparatus [for water], (P.), B., 254*.

Pates, E. W. See Thorne, P. C. L.

Pathé Cinéma (ano. Etabl. Pathé Frères), solvents for nitrocellulose and cellulose acetate, (P.), B., 533.
 plastic compounds of acetylcellulose, (P.), B., 661.
 Paton, R. F. See Sawyer, R. A.
 Patrick, W. A., producing gels for catalytic and absorbent purposes, (P.), B., 346*.
 Patrick, W. A., and Bachman, P. W., adsorption of ions on a mercury surface, A., 239.
 Patrick, W. A., and Barclay, E. H., behaviour of silica gel towards certain alkalis and salts in aqueous solution, A., 24.
 Patrick, W. A., and Silica Gel Corporation, preparing catalytic agents, (P.), B., 346*.
 stabiliser for nitrated organic compounds [explosives], (P.), B., 934.
 Patrick, W. A. See also Hunter, A. S.
 Patrouilleau, L. G., purification of flour, (P.), B., 848.
 Patrouilleau, L. G., and Société Anonyme Alumine et Dérivés, manufacture of alumina and aluminium sulphate, (P.), B., 630.
 manufacture of fused cement, (P.), B., 880.
 Patschovsky, N., micro-chemical identification of potassium [plants] as picrate, A., 209.
 Pattielsky, K., degree of swelling of coking coals, with particular reference to the geological and tectonic conditions of the coal seams, B., 969.
 Patterson, A. M., proposed international rules for numbering organic ring systems, A., 157*.
 history of the word "alum," A., 708.
 Patterson, J., carbohydrate of normal urine, A., 970.
 Patterson, R. S., and Whytlaw-Gray, R., photophoresis, A., 1211.
 Patterson, T. S., optical rotatory dispersion, A., 662.
 Patterson, W. H., bath for observations at lower temperatures, A., 932.
 Patterson, W. H. See also Carrington, J. H.
 Pattinson, H. D. See Seal Co. (London), Ltd.
 Pattison, J. J., and Waldbauer, L. J., radioactivity of the alkali metals, A., 772.
 Pauchard, M. E., iodometric determination of aldehyde sugars, A., 535.
 Paul, B. K., and Sarkar, P. V., molybdates of cobaltiammines and molybdatocobaltiammines, A., 588.
 Paul, J. A., evaporator, (P.), B., 520.
 Paul, J. R., influence of muscle-tissue and insulin on rotatory power of dextrose, A., 869.
 post mortem blood chemical determinations, A., 1054.
 Paul, R., pectin from apples, (P.), B., 766.
 Pauli, K., rapid method for the analysis of hydrosulphide liquors, B., 629.
 Pauli, W., migration velocity and charge number of colloidal gold, A., 241.
 behaviour of neutral sodium caseinogenate in membrane hydrolysis, A., 674.
 Pauli, W., and Perlak, F., general colloid chemistry. XXI. Stability and constitution of Bredig silver sols, A., 901.
 Pauli, W., and Valko, E., general colloid chemistry. XIX. Constitution of silicic acid sols, II., A., 574.
 general colloid chemistry. XX. Interpretation of the physico-chemical analysis of colloids by means of the theory of electrolytes, A., 901.
 Pauli, W., and Wit, H., electrolyte-free water-soluble proteins. VI. Acid glutins and the Donnan equilibrium, A., 1007.
 Pauli, W. See also Frisch, J., and Fuchs, L.
 Pauli, W., jun., hydrogen spectrum from the point of view of the new quantum mechanics, A., 555.
 Pauli, W., jun. See also Mensing, L.
 Pauling, C. See Kulas, C.
 Pauling, L., quantum theory of the dielectric constant of hydrogen chloride and similar gases, A., 225, 661.
 dielectric constant and molecular weight of bromine vapour, A., 456.
 dynamic model of the chemical bond and its application to the structure of benzene, A., 662.
 Pauling, L., and Hendricks, S. B., prediction of the relative stabilities of isosteric isomeric ions and molecules, A., 458*.
 Pauling, L. See also Hendricks, S. B., and Kirkpatrick, L. M.
 Pauls, I. See Kühl, F.
 Paulson, P. M., and Roessler & Hasslacher Chemical Co., accelerator for vulcanisation of rubber, (P.), B., 453.
 Paulus, M. G. See Rogers, F. M., and Standard Oil Co.
 Pauschardt, H. See Feist, F.
 Pauthenier, M., photographic measurement of electrostriction in carbon tetrachloride, A., 230.
 Pauthenier, M. See also Bruhat, G.
 Pavelik, F., [carbonisation] retort, (P.), B., 699.
 Pavelka, F., drop reactions for the detection of titanium, zirconium, and thorium, A., 1222.
 Pavlica, F., amyloid, A., 196.
 Pavlov, P. N., adsorption of salts by the colloidal substances of certain micro-organisms, A., 900.
 true and apparent adsorption, A., 1201.
 adsorption of acids by hide in connexion with swelling phenomena. I., B., 958.
 Pavlovitsch, P., insoluble matter in oakwood extract, B., 375.
 Pavlovski, N. M. See Zaykovski, J.
 Pawietta, A. See Meyer, Julius.
 Payman, S. See British Thomson-Houston Co., Ltd.
 Payman, W., and Robinson, H., pressure waves sent out by an explosive. I., B., 421.
 Payman, W., and Wheeler, R. V., explosive reactions in gaseous media; "uniform movement" during the propagation of flame, A., 689.
 Payne, A. R. See Flint, F. C.
 Paynter, L. E. See Basterfield, S.
 Peabody, E. H., apparatus for the combustion of gaseous, pulverised, or similar fuels, (P.), B., 624*.
 apparatus for the combustion of elastic and liquid fuels, (P.), B., 624*.
 method of burning pulverised fuel, (P.), B., 907.
 Peacheay, S. J., and Skipsey, A., vulcanisation of rubber, (P.), B., 68.
 Peacock, D. H., benzylisation of amines. III., A., 691.
 application of nitrobenzyl cellulose ethers to the dyeing of cotton, B., 270.
 Peacock, D. H., and Menon, B. K., isetyl and ethyl iodides from the corresponding toluenesulphonates, A., 381.
 Peacock, H. B., Hall effect in evaporated films of iron, cobalt, nickel, palladium, and platinum, A., 565.
 Peacock, S., and Cook, N. E., degassing and deoxidising steel, (P.), B., 283.
 Peacock, S. See also Scott, J. M., and Strong, W. E. S.
 Peake, A. M. See Ormandy, W. R.
 Pearce, J. G. See Fletcher, J. E.
 Peard, G. T. See Johnston, J. H. S.
 Pearl, A. F., process of decorating material, (P.), B., 786.
 Pearl, R., and Allen, A., influence of alcohol on the growth of seedlings, A., 438.
 Pear soll, W. H., and Ewing, J., diffusion of ions from living plant-tissues in relation to protein isoelectric points, A., 326.
 Pearce, L., report on sewage sludge, B., 470.
 Pearson, R. See Coke & Gas Ovens, Ltd.
 Pease, E. L., manufacture of fertilisers, (P.), B., 559*, 685, 717.
 Pease, E. L., and Tyrer, D., manufacture of fertilisers, (P.), B., 717.
 Pease, E. L., and Cook, R. S., equilibrium in the reaction $\text{NiO} + \text{H}_2 \rightleftharpoons \text{Ni} + \text{H}_2\text{O}$; free energy of nickelous oxide, A., 684.
 Pease, E. N., and Stewart, L., hydrogenation of ethylene in presence of metallic calcium, A., 43.
 Peat, S., application of the method of thermal analysis to determine quinquevalence in aromatic arsenicals, A., 418.
 Peat, S. See also Charlton, W., and Cooper, C. J. A.
 Pecheux, H., dielectric constant of petroils and paraffins, B., 971.
 Pechnold, R. See Fürth, R.
 Pechkrantz, R., packing for electrolytic apparatus for decomposition of water, (P.), B., 793.
 Péchon, L., determination of carbamide in blood, A., 763.
 Peck, A. B. See Riddle, F. H.
 Peck, A. S., new glass stone: $\text{Na}_2\text{O}_3\text{CaO}_6\text{SiO}_2$, B., 877.
 Pecalski, T., sublimation and crystallisation of metals, A., 461.
 Peccenini, O., and Kawahara, M., protenes of urine. I. Effect of diet on the pepsinogen of normal urine and the anti-pepsin of the serum, A., 1275.
 Peccenini, O. See also Kawahara, M.
 Pedge, J. T. See Firbright Co., Ltd.
 Pedersen, A. Z., and Madsenell Corporation, coating with metals, (P.), B., 133.
 Pedersen, H., and Orkla Grubekåtibolag, treatment of alloys containing copper and iron, (P.), B., 64*.
 Pederson, C. S., Peterson, W. H., and Fred, E. B., forms of lactic acid produced by pure and mixed cultures of bacteria, A., 759.
 Peebles, D. D., milk product, (P.), B., 383.
 Peek, R. L., Torell, T. F., and National Trust Co., Ltd., refining copper-nickel matte, (P.), B., 245.
 Pehrson, A. H., rotary furnace, (P.), B., 305*.
 Pehrson, A. H., and Pehrson, A. P., rotary furnace, (P.), B., 224*.
 Pehrson, A. P. See Pehrson, A. H.
 Peignier, P., rotary powers of borneol, isoborneol, and their esters, A., 1081.
 Peignier, P. See also Vavon, G.
 Peirce, W. M., Anderson, E. A., and New Jersey Zinc Co., die-casting metal [alloy], (P.), B., 855.
 Peiser, F. See Schmitz, E.
 Pekarskaja, G. See Rakuzin, M. I.
 Pélahon, H., two varieties of mercuric oxide and direct formation of oxychlorides and oxybromides, A., 368*.
 Pellegrini, G., reduction of nitro-derivatives by means of sodium amalgam, B., 576.
 Pellems, L. See Konrad, E.
 Pelling, A. J., hydrolysis of aluminium sulphate; an application of the quinhydrone electrode, B., 125.
 Peizer, H. L. See Sinclair Refining Co.
 Pemberton, E. S. See Lomax, E. L.
 Penau, H. See Fabre, R.
 Penfold, A. E. See Dunlop Rubber Co., Ltd.
 Penfold, A. R., identity of uncinol with eudesmol, A., 1042.
 essential oil of *Boronia citriodora* and the occurrence of citronellol, B., 803.
 essential oils of *Melaleuca linariifolia* (Smith) and *M. alternifolia* (Cheel), B., 804.
 essential oil of *Eriostemon myoporoides* (de Candolle), B., 804.
 essential oil of *Baeckea gunniana*, var. *latifolia* (F. v. M.), B., 804.
 Penfold, A. R., and Grant, R., germicidal values of some Australian essential oils and their pure constituents, together with those for some essential oil isolates and synthetics, III., B., 804.
 Penfold, A. R., and Simonsen, J. L., essential oil from the leaves of *Murraya koenigii* (Spreng.), *Murraya exotica* (Linn.), and *M. exotica* var. *oratifoliolata* (Bengt.), B., 804.
 Penick & Ford, Ltd. See Prucha, M. J., and Widmer, J. M.
 Pennell, R. H. L., filtration of water or liquid, (P.), B., 178*.
 Penning, F. M., intermittent glow-discharge of neon, A., 445.
 scattering of electrons in ionised gases, A., 989.
 Pennyquick, S. W., unimolecularity of the inversion process, A., 249.
 People's Savings and Trust Co. of Pittsburgh. See Hawley, C. G.
 Peper, J. P., determination of the age of bread, B., 418.
 Pepper, A., weighting silks, (P.), B., 123, 786*.
 Pepperell, R. See Elliott, G. A.
 Percival, G. A. See Edison Swan Electric Co., Ltd.
 Percival, G. H., and Stewart, C. P., pathological variations in the serum calcium, A., 1180.
 Perdra, H., and Compagnie Nationale de Matières Colorantes et Manuf. de Prod. Chim. du Nord Réunis, Etabl. Kuhlmann, preparation of tetrabenzyloperylene, (P.), B., 86.
 Perdra, H. See also Compagnie Nationale de Matières Colorantes et Manuf. de Prod. Chim. du Nord Réunis, Etabl. Kuhlmann.
 Perovskaja, N. O. See Schmidt, A. A.
 Perovsky, R. See Pringsheim, H.
 Perkin, A. G. See Miller, W. B.
 Perkin, F. M., treatment of peat, (P.), B., 971.
 Perkin, W. H., jun., Ray, J. N., and Robinson, R., synthesis of brazlin and hematoxylin and their derivatives. I. Veratrylidene-7-methoxy-chromanone, and a new synthesis of some benzopyrylium salts, A., 732.
 Perkin, W. H., jun., and Rnbenstein, L., 3:4- and 2:5-dimethoxyphenylhydrazine, A., 394.
 Perkin, W. H., jun., and Seligwick, W. G., tetrahydroacridine, octahydroacridine, and their derivatives. II. Resolution of the octahydroacridines (A) and (B), A., 410.
 Perkin, W. H., jun., and Stone, J. F. S., action of halogens on 2:4-dimethylbenzoyl chloride, A., 64.
 Perkin, W. H., jun. See also British Dyestuffs Corporation, Ltd., Campbell, R., Clemo, H. R., Haworth, R. D., and Ing, H. R.
 Perkins, G. A., oxidation of chaulmoogric acid by permanganate, A., 834.
 Perkins, M. F. See Tartar, H. V.
 Perkins, W. G., and Metals Production Co. of North America, leaching process for extraction of metals, (P.), B., 96, 198*.

Perks, A. A., heat reactions occurring during vulcanisation of rubber, B., 715.

Perl & Co, J., preparation of starch solutions not precipitated by basic salts, (P.), B., 642.

Perlaik, F. See Pauli, W.

Perlmann, G. See Gor, G., and Neuberg, C.

Perman, E. P., and Lovett, J., vapour pressure and heat of dilution of aqueous solutions [of carbamide], A., 127, 578.

Permutit Akt.-Ges., base-exchanging materials for softening water, from clay, (P.), B., 470, 614.

Permutit Co. See Tellier, R. G.

Pernet, J. C. See Gomberg, M.

Pernot, (Mlle.) M., iodomercurates of potassium which crystallise from acetone solution, A., 695.

Perolio, G. See Ponzi, G.

Perotti, L. See Oddo, B.

Perpétot, H., reaction between gaseous ammonia and the chlorides of phosphorus, A., 137.

Perquin, J. N. J. See Waterman, H. I.

Perreau, (Mlle.) A. See Boutaric, A.

Perret, A., zinc oxide as a photo-chemical sensitisier, A., 366.

Perret, J. See Rupe, H.

Perret, U., oxidation and constitution of sulphur black, B., 527.

Perrihion, H. See Grignard, V.

Perrier, A., and Borel, C. E., electrical symmetry of nickel molecules, A., 115. electrical symmetry of nickel, A., 230.

Perrin, F., determinations of the mean life in the activated state of fluorescent molecules, A., 223.

prolonged fluorescence of solid and dissolved uranium salts, A., 558.

Perrin, F. See also Auger, P., and Lumière, A.

Perrin, J., and Choucroun, (Mlle.) J., parallelism between power of fluorescence and reaction velocity, A., 834.

Perrin, M. W. See Humby, S. R.

Perrot, E., and Rouquier, A., yucca, a new caffeine drug, B., 644.

Perrot, G. St. J., and Yablick, M., purification of air containing ammonia, (P.), B., 30, 726.

Perry, H. M. See Brady, O. L.

Perry, J. A. See Humphreys & Glasgow, Ltd.

Perry, J. H., adsorption of vapours by alumina gel, A., 19.

Perry, J. H., and Bardwell, B. C., vapour pressures of solid and liquid cyanogen, A., 117.

Perry, J. H., and Porter, F., vapour pressures of solid and liquid hydrogen cyanide, A., 312.

Perry, J. H. See also Lind, S. C., and Porter, F.

Perschke, W., distribution of a substance between two solvents, and its solubility, A., 345.

triboluminescence, A., 455.

Perschke, W., and Tschufarov, partition of a mixture between two immiscible solvents, A., 345.

Persic, R. L. See Tschitschibabin, A. E.

Persico, E., kinetic theory of a highly ionised gas, A., 351.

Person, V. M., catalysis in electrochemistry, A., 804.

Peschard, M., relations between artificial ferronickel and a meteoric iron containing nickel, B., 58.

Peskov, N., chemical effect of X-rays, A., 225.

Pestalozzi, S. M. See Ruggli, P.

Peter, A. M. See Buckner, C. D.

Peterhauser, F., dyeing of wool with indigo, B., 535.

Peterkin, A. G., and Ferris, S. W., vacuum assay distillation test [for mineral oils], B., 84.

Peters, A. T. See Challenger, F.

Peters, C. G., index of refraction of glass at higher temperatures, B., 666.

Peters, C. G. See also Merritt, G. E.

Peters, C. S. See McLennan, J. C.

Peters, J. P., Bulger, H. A., and Eisenmann, A. J., total acid-base equilibrium of blood-plasma. II. Effect of tension of carbon dioxide on concentration of acids in oxygenated blood. III. Differences between arterial and venous blood, A., 422.

Peters, J. P., Bulger, H. A., Eisenmann, A. J., and Lee, C., total acid-base equilibrium of blood-plasma. I. Concentration of acids and bases in normal plasma. IV. Effects of stasis, exercise, hyperventilation, and anoxemia; and the causes of tetany. V. Miscellaneous pathological conditions, A., 122.

total acid-base equilibrium of plasma in health and disease. VI. Diabetes, A., 636.

Peters, K., toning silver images, (P.), B., 300.

Peters, K. See also Paneth, F.

Peters, M., steel alloy for the rollers of Pilger rolling mills, (P.), B., 17.

Peters, W. A., jun., and Baker, T., high-precision fractional distillation in the laboratory, B., 175.

Petersen, A. O. H. See Naam. Vennoots. Nederlandsche Installatie Maatschappij Therna.

Petersen, H., manufacturing sulphuric acid, (P.), B., 486.

Petersen, M., and Green, J. B., wave-lengths and pressure-shifts in the spectrum of magnesium, A., 102.

Petersen, W. F., and Hughes, T. P., mineral metabolism of the lymph following injections of *I*- and *D*-adrenaline, pituitrin, and pilocarpine, A., 205.

Peterson, A. A. See Jordan, L.

Peterson, C. F. See British Thomson-Houston Co., Ltd.

Peterson, J. B., qualitative test to show the absence of citrate or tartrate in mixtures, A., 84.

Peterson, J. M. See Gilman, H.

Peterson, W. H., Elvehjem, C. A., and Jamison, L. A., variations in mineral content of cabbage and sauerkraut, B., 252.

Peterson, W. H., Fred, E. B., and Martin, E. A., effect of molecular complexity on end-products of fermentation by *Clostridium thermocellum*, A., 1278.

Peterson, W. H. See also Domogalla, B. P., Fred, E. B., Pederson, C. S., and Viljoen, J. A.

Pettersson, F. See Field, S.

Petit, A., aluminium-silicon alloys, B., 58.

Petit, M., special Alpax alloys, B., 882.

Petit, P., wort-boiling under pressure, B., 417.

Petit, P., and Richard, mechanical liquefaction of starch, A., 502.

Petit, T. P. L., path of the gases in the distillation of coal, B., 394.

removing hydrogen sulphide from gases, (P.), B., 1006*.

Petitcolas, P. See Courtot, C.

Petkov, A. P. See Lipp, P.

Petow, H. See Kosterlitz, H.

Petrányi, G., determination of the total quantity of blood, A., 762.

Petrenko, G. See Vinogradov, G.

Petrenko, G. J., electrical conductivity of silver-zinc alloys, A., 229.

Petrenko, S. N., comparative slow bend and impact notched-bar tests on some metals, B., 57.

Petrenko-Kritschenko, P., and Oplotzky, V., law of periodicity. I. Activity of organic halides, A., 1121.

Petrescu, E. See Longinescu, G. G.

Petr, I., electrostatic capacity of vegetable tissues and organic colloids, A., 679.

Petrich, W. See Riesenfeld, E. H.

Petríkálm, A., explosion spectra of mercury fulminate and some azides, A., 774.

Pétrole Synthétique, catalyst and adsorbent for the production of hydrocarbons, (P.), B., 147.

Petroleum Laboratories, Inc. See Van de Water, F. C.

Petroleum Rectifying Co. See Meredith, W.

Petroleum Rectifying Co. of California. See Eddy, H. C., and Girvin, C. W.

Petronio, R. See Giua, M.

Petrov, S. N. See Ipatiev, V. N.

Petrov, G. S., compositions containing synthetic resins, (P.), B., 554.

purification of naphtha, (P.), B., 864.

Petrov, G. S., and Danilovitsch, A. I., oxidation and polymerisation of vegetable oils and their fatty acids, B., 372.

oxidation of petroleum oils, B., 571.

Petrov, G. S., and Dimakov, S. J., polymerisation of linseed and sunflower oils in the form of their soaps, B., 712.

Petry, R. L., secondary electron emission from tungsten, copper, and gold, A., 989.

critical potentials in secondary electron emission from iron, A., 1073.

Petschacher, L., increase in specific viscosity and colloidal state of serum proteins, A., 856.

changes in the colloidal state of serum proteins under physical influences. III., A., 856.

Petschacher, L., Rittmann, R., and Galehr, O., colloidal condition and chemical and physical constitution of blood-serum, IV., A., 1166.

Petterson, E. See Euler, H. von.

Petterson, H., detection of the products of atomic disintegration in the transmutation of elements, A., 1223.

Petty, E., and De Laval Separator Co., extracting waxes from crude petroleum, (P.), B., 40.

producing wax-free products from crude petroleum, (P.), B., 40.

separating [paraffin] wax from lubricating oil, (P.), B., 478.

Petz, F., and Elektrizitäts-Akt.-Ges. vorm. Schuckert & Co., electrolytic cell, (P.), B., 413*.

Peufaillit, L. See Austerweil, G.

Pevsner, (Miss) S. See Schilov, N.

Pewson, G. See Steppuhn, O.

Peytral, (Mlle.) E., pyrogenic decomposition of ethylene oxide and the mean temperature at which the decomposition reactions occur, A., 487.

pyrogenic decomposition of cinnamaldehyde by sudden heating to a high temperature, A., 519.

Peytral, (Mlle.) E. See also Muller, J. A.

Pezold, E. von, analysis of organic substances of high ash content, in particular of Estonian shale, B., 115.

Pezold, G. J., filter, (P.), B., 424.

drying apparatus, (P.), B., 521.

Pfälzische Chamotte & Thonwerke (Schiffer & Kircher) Akt.-Ges., and Strack, O., filling bodies for heat-storage vessels, absorption towers, and the like, (P.), B., 729*.

Pfälzische Chamotte & Thonwerke (Schiffer & Kircher) Akt.-Ges., and Wagapoff, G., manufacture of refractory bricks, (P.), B., 917.

Pfaff, A., action of gases on porcelain glazes, B., 240.

Pfaff, K. See Farbwerke vorm. Meister, Lucius, & Brüning.

Pfahler, H., analysis of soya-bean oil, B., 413.

polymerisation of fatty oils, B., 759.

Pfaltz, M. H. See Levene, P. A.

Pfanhäuser, W. A. F., and Langbein-Pfanhäuser-Werke Akt.-Ges., withdrawal of vapours and gases from electrolytic tanks, (P.), B., 198.

electrolytic production of an adherent burnish on rustless iron or steel, (P.), B., 921.

galvanising bath, (P.), B., 933.

Pfankuch, E. See Houben, J.

Pfannenstiel, A. See Willstätter, R.

Pfannmüller, W. See Berl, E.

Pfau, A. S., constituents of lichens. I. Constitution of atranorin, A., 826.

Pfau, A. S., and Ofner, A., influence of the solvent on the formation of naphthyl methyl ketone, A., 837.

Pfau, E. See Danckwort, P. W.

Pfeiffer, H., preparation of acetoacetanilide, A., 59.

acetoacetanilide, A., 1132.

Pfeiffer, H. See also Busch, M.

Pfeiffer, M. See Ruzicka, L.

Pfeiffer, P., significance of hydration and adsorption in the mechanism of the production of E.M.P., A., 1213.

manufacture of CC-disubstituted compounds of barbituric acid and 4-dimethyl-amino-1-phenyl-2-3-dimethyl-5-pyrazolone, (P.), B., 172.

Pfeiffer, W., and Angerer, O., compound of veronal with pyridamone. II., A., 739.

theory of dyeing on wool and silk, B., 402.

Pfeiffer, W. H. See Westman, A. E. R.

Pfeil, C. B., process by which aluminium and its alloys may be applied to ferrous metal, (P.), B., 133.

process for making and combining "corrode-resisting" metals, (P.), B., 133.

Pfeil, L. B., effect of occluded hydrogen on the tensile strength of iron, B., 790.

Pfeil, L. B. See also Edwards, C. A.

Pfiffner, E., and Ow-Eschingen, M., dissolving cellulose esters and cellulose ethers, (P.), B., 739.

Pfisterer, R., apparatus for the continuous treatment of solids with liquids; [recovery of sulphur from spent gas-purifying material], (P.), B., 649.

Pfeifer, G. See Badische Anilin- & Soda-Fabrik.

Pfützer, G. See Badische Anilin- & Soda-Fabrik.

Pfnnid, A. H., intensities and reflecting powers in the Lyman region of the hydrogen spectrum, A., 649.

Pfundt, O. See Jander, G.

Phair, R. A., and Kohnstamm, H., & Co., Inc., treating textile material, (P.), B., 915.

Phebns, W. C., and Blake, F. C., X-ray analysis of certain alloys, A., 1083.

Phelps, E. P., and Rowe, A. W., ether. III. Determination of aldehyde as a contaminant, B., 461.

Phelps, E. R. See Sleator, W. W.

Phelps, F. P., and Hudson, C. S., relations between rotatory power and structure in the sugar group. XII. Preparation and properties of pure α -methyl-d-lyxoside, A., 501.

Phelps, L. H. See Jordan, L.

Philip, K., long-range α -particles from the active deposit of thorium, A., 772.

Philippi, C. A. See Fink, C. G.

Philippi, E. See Erben, F. X.

Philippo, M. See Balthazard, V.

Philippovich, A. von. See Tropsch, H.

Philipp, B. See Schaefer, C.

Philipp, J. M., filtering apparatus, (P.), B., 856.

Philips Gloeilampenfabr. See Naamli, Vennoots. Philips Gloeilampenfabr.

Phillips, H., dependence of rotatory power on chemical constitution. XXVII. Optical properties of n -alkyl n -toluenesulphonates, A., 159.

Phillips, H. See also Harrison, P. W. B.

Phillips, H. W. L. See British Aluminium Co., and Gwyer, A. G. C.

Phillips, J. R. See Blair, Campbell, & McLean, Ltd.

Phillips, L. R. See Tyndall, A. M.

Phillips, M., and Goss, M. J., preparation and properties of methylisopropyl quinoline-yellow, A., 526.

varnish and paint remover, (P.), B., 554.

Phillips, N. E., carburising process, (P.), B., 96.

Phillips, R. A. See Gross, Sherwood, & Heald, Ltd.

Philpot, A. J., radiation pyrometers, B., 855.

Phipps, T. E., and Brode, W. R., two kinds of coloured rock salt, A., 658.

Phipps, T. E., Lansing, W. D., and Cooke, T. G., temperature-conductance curves of solid salts. I. Halides of sodium, A., 231.

Phipps, T. E. See also Gibson, G. E.

Phosphorus-Hydrogen Co. See Liljenroth, F. G.

Phragmén, G., constitution of iron-silicon alloys, B., 828.

Phragmén, G. See also Westgren, A.

Phukan, L. N. See Mitra, S. K.

Piacentini, G. See Bernardi, A.

Piatti, L. See Weissenberger, G.

Piaux, L., spontaneous oxidation of 1- and 7-methyluric acid and of 1:3-dimethyluric acid in alkaline solution, A., 1261.

Picard, P., violutoside, a new methyl salicylate glucoside extracted from *Viola cornuta*, L., A., 715, 942*.

Picard, A., continuous spectrum and the γ -ray spectrograph of J. Thibaud, A., 106.

Picard, J., radicals and meri-quinonoid compounds, A., 946.

absorption colours of the second order, A., 1079, 1080.

colour of the tervalent titanium ion, A., 1080.

s-diphenyldimethyl-*p*-phenylenediamine and the colour of mono-salts and di-salts of haloquinonoid compounds, A., 1133.

Piccardi, G., affinity of the iodine atom for the electron, A., 769.

affinity of the neutral bromine atom for the electron, A., 769.

ionisation potential of silver, A., 876.

Piccardi, G. See also Rolla, L.

Pichard, C., and Pichard, E., manufacture of felt, (C.), B., 532.

Pichard, E. See Pichard, C.

Pichard, G. See Rivière, G.

Pichetto, A. See Musatti, I., and Semeria, G. B.

Pick, E. P. See Glaubach, S.

Pick, L. See Milbauer, J.

Pick, P., storing and shipping containers for acids and alkaline liquids, (P.), B., 619.

Pickard, J. A. See Hele-Shaw, H. S., and Hind, H. L.

Pickard, R. H., Lloyd, D. J., and Caunce, A. E., producing gas-tanned leather, (P.), B., 101.

production of leather, (P.), B., 101.

preparation of chrome-tanned leather for storage in the crust condition previous to dyeing, (P.), B., 101.

stuffing of chrome-tanned heavy leather, (P.), B., 138.

Pickard, R. H. See also Lloyd, D. J.

Pickens, R. M., magnesium hydrogen halides, A., 265.

Pikering, E. C. See Wilson, F. J.

Pikering, S. F., compressibilities of gases, A., 464.

relations between temperatures, pressures, and densities of gases, A., 569.

Pickering, S. F. See also Blanchard, (M)iss M. S.

Pickett, F. N. See Thomson, D.

Pickles, S. S., influence of particle size in rubber manufacture, B., 956.

Picon, M., bismuth nitrates, A., 36.

Pictet, A., molecular weight of soluble starch, A., 387.

Pictet, A., and Chavan, J., heteroerucosan, A., 1126.

Pictet, A., and Georg, A., syntheses of isomaltose and gentiobiose, A., 152.

Pictet, A., and Salzmann, R., dihexosan and tetrahexosan, A., 52.

Pictet, A., and Vogel, H., synthesis of melibiose, A., 1229.

Pictet, A. See also Castan, P., and Georg, A.

Pien, J. See Brioux, C.

Pieper, H. See Abderhalden, E.

Pier, M. See Badische Anilin- & Soda-Fab.

Pierce, H. C., Humphries, C. H., and Udylite Process Co., enamelling [cadmium and zinc], (P.), B., 642.

Pierce, W. C., preparing fruit juice, (P.), B., 141*.

Pierce Petroleum Corporation. See Wadsworth, J. M.

Pierlot, G., saffron, B., 107*.

Pieroni, A., [with Buzzi, G.], tautomeric forms of hydroxyphenylazocarboxylamide, A., 285.

Pieroni, A., and Veremeenco, P., oxidation products of some pyrrole compounds, A., 1167.

Pierre, W. H., hydrogen-ion concentration of soils as affected by carbon dioxide and by the soil-water ratio, and the nature of soil acidity, B., 102.

Pierret, E., cryoscopy in sodium sulphate [decanhydrate, A., 674.

Pierrot, M., treatment of raw phosphates, (P.), B., 507.

Piersol, R. J., cold electronic discharge from molybdenum, A., 1074.

Pietsoch, E. See Schwab, G. M.

Piette, O. J. G. See Damiens, A. A. L. J.

Piettre, M., muscle albumin (myoalbumin), A., 84.

acetone method of isolation of the haemolysin in the albumin fraction of haemolytic immune serum, A., 635.

physical and chemical influences in haemolysis by haemolytic immune-sera, A., 856.

Pigg, C. E., and Commercial Solvents Corporation, production of butyric aldehyde [butyraldehyde], (P.), B., 463.

Pignot, A., ignition of carburetted mixtures [motor fuels] by adiabatic compression, B., 260.

Pigott, M. G. See Holmes, A. D.

Pigulevski, G. V., formation of resin in conifers. II. Formation of resin in *Pinus cembra*, A., 210.

Pigulevski, G. V., and Grigorieva, V. F., formation of resin in conifers. III. Formation of resin in *Abies sibirica*, A., 211.

Pigulevski, G. V., and Vladimirova, V. V., formation of resin in conifers. I. Formation of resin in the needles of *Pinus strobus*, A., 211.

Pike, L. F. See Holdaway, H. H.

Pike, R. D., treating sulphide ores [for recovery of sulphur, copper, and iron], (P.), B., 245.

method for calcining and clinkering [cement] with recovery of by-product heat and by-products, (P.), B., 879, 949.

Pike, R. D., and Cole-French Co., apparatus for melting and fusing glass, (P.), B., 980.

fusing glass, (P.), B., 980.

Pike, R. D., and West, G. H., metallurgical process, (P.), B., 711.

Pilon, H., and Laborde, A., immersion of metals in homogeneous media opaque to X-rays; improvement in radiographic methods, A., 1194.

Piña de Rubies, S., new lines between 3100 and 2200 \AA in the arc spectrum of lanthanum, A., 103*.

new lines in the arc spectrum of scandium at normal pressure, A., 446.

arc spectrum of europium; measurements between 3500 and 3100 \AA under normal pressure, A., 986.

Pinck, H. See Hackspill, L.

Pinck, L. A., and Hetherington, H. C., preparation of cyanamide hydrochloride, A., 825.

Pineus, J. B., Peterson, H. A., and Kramer, R., inorganic constituents of blood-serum in disease, A., 971.

Pincussen, L., Influence of radiation on metabolism. II. Influence of sunlight on mineral metabolism, A., 90.

alterations in the enzymic activity of the blood. III. The influence of radiation on catalase, A., 432.

enzymes and light. IX. Diastase. IV., 757.

Pincussen, L., and Coelho, E., alterations in the enzyme activity of the blood. I. Influence on nuclease and lipase, A., 94.

Pincussen, L., and Croihelm, G., micro-determination of ions in organs and similar material, A., 764.

Pincussen, L., and Juliusberger, F., analytical investigations. V. Nephelometric determination of phosphate, A., 1984.

Pincussen, L., and Makrinoes, I., Influence of radiation on metabolism. I. Alteration in blood potassium and calcium due to radiation, A., 90.

Pincussen, L., and Seligsohn, F., enzymes and light. VIII. Catalase. A. 432.

alterations in the enzyme activity of the blood. II. Factors governing the alteration of catalase, A., 432.

Pine, J. A. W., preparation of Trinidad pitch lake asphalt and the like, (P.), B., 655.

Pine, J. See Klein, A.

Pine Waste Products, Inc. See Greenwood, F. E., and Wallace, J. H.

Pinel, A., washing artificial silk, (P.), B., 269*.

Pink, L., manufacture of edible sugar from wood, (P.), B., 459.

Pinkerton, A., and Tait, W. H., season-cracking in arsenical copper tubes, B., 829.

Pinkus, G., danger of mercury vapour, A., 815.

Pinto, J. A., thermal methods for assaying gold and platinum, B., 829.

Pinto, L., benzidine derivatives of thiocarbamide, A., 607.

Pintsch, J., Akt.-Ges., impregnating wood, (P.), B., 411.

Pintsch, J., Akt.-Ges. See also Benhöld, W., and Rosenthal, H.

Piper, S. H., Brown, D., and Dymant, S., X-rays and the constitution of the hydrocarbons from paraffin wax, A., 43.

Piper, S. H., Malkin, T., and Austin, H. E., X-ray study of some structural modifications of long-chain compounds, A., 1083.

Piperare, P., and Helbrunner, A., manufacture of titanic and zinc compounds, (P.), B., 651*.

Piperare, P. See also De Hedouville, G.

Pipkin, M., inside frosting of incandescence [electric] lamps, B., 833.

Piqué, J. See Moran, T.

Pirbright Co., Ltd., and Beale, A., apparatus for separating liquids [of different densities], (P.), B., 616*.

Pirbright Co., Ltd., and Peddie, J. T., filtering liquids [separating oil from water], (P.), B., 80.

Pirk, L. See Fromm, E.

Pirlot, A., determination of tin in cassiterite, B., 921.

Pirsch, H. See Kuhn, A.

Pirsche, K., acetaldehyde as an intermediate product in the germination of fat-containing seeds, A., 547.

Pirsche, K. See also Klein, G.

Pisarshevski, L. V., reaction of the transference of electrons from iodine ions to the ions of tervalent iron, A., 914.

electronic character of the catalysis of potassium chlorate by oxides and metals, A., 917.

Pisarshevski, L. V., and Roiter, V., mechanism of the catalysis of hydrogen peroxide, A., 917.

Pisarshevski, L. V., and Telni, S., method of obtaining iodine, based on electrolysis in alkaline solution, B., 88.

Pischtschimuka, P. S., formation of ethyl mercaptan by the action of phosphorus pentasulphide on alcohol, A., 145.

Pistor, G. See Chem. Fabr. Griesheim-Elektron., and L. G. Farbenind. Akt.-Ges.

Pitkethly, R. See Dunstan, A. E.

Pitkin, W. R. See Smithells, C. T.

Pitman, E. C., and Du Pont de Nemours & Co., E. I., non-static photographic film, (P.), B., 341.

Pitman, E. C., Hunter, G. F., and Du Pont de Nemours & Co., *E. I.*, removing colouring matter from smokeless powder, (P.), B., 468.

Pittenger, W. H. See Cretcher, L. H.

Pitter, A. V. See McBain, J. W.

Pittsburgh Plate Glass Co. See Asplundh, E. T., Galt, H. A., Harrington, A. L., and Jenkins, J. D.

Pittsburgh Research Corporation. See Dixon, J. L.

Piutti, A., relationships between radioactivity, density, helium content, and hafnium content in certain zircons, A., 43.

didactic classification table of the elements, A., 221.

Piutti, A., and Boggio-Lera, E., transformation of mercury into gold, A., 699.

Piver, W. C., making sulphur products [fungicides], (P.), B., 71.

Pivovarski, E., thermal treatment of molten iron and its application to malleable cast iron, B., 91.

Pivovarski, E. See also Esser, H., and Oberhoffer, P.

Placeres, J., pharmaceutical lactic ferment preparations, B., 849.

Plachetanu, I. I., interaction between radiation and a quadrupole atom, A., 1187.

Plagge, H. H., Maney, T. J., and Gerhardt, F., physical and chemical changes of Grimes apples during ripening and storage, A., 1282.

Plagwitz, P., reduction of photographic negatives, diaapositives, films, bromide and gaslight images, (P.), B., 220.

Planche, G., and Ghigi, E., constitution of Fischer and Hepp's phenylpyrrole, A., 178.

Planck, M., new statistical definition of entropy, A., 118.

Plant, S. G. P. See Manjunath, B. L., and Oakeshott, S. H.

Plantefol, L. See Mayer, A.

Plassmann, J., [retort for] carbonising fuels, (P.), B., 228.

distillation or coking of fuels, (P.), B., 572.

Platen-Munters Refrigerating System Aktiebolag, refrigerating apparatus of the absorption type, (P.), B., 1, 835.

Platitschenski, P. See Palladin, V.

Platon, J. B., determination of fat in milk by the Thomé method, B., 563.

Platon, J. G., purification of cast iron, (P.), B., 162.

Platonov, M. See Lebedev, S. V.

Platt, B. S. See Dawson, E. R.

Platt, J. H., and Hudson, (Miss) D., solubility of potassium bisulphite, B., 1012.

Plattner, G. See Tambor, J.

Platzsch, M. See Chemisches Laboratorium für Tonindustrie & Tonindustrie-Zeitung, H. Seger & E. Cramer.

Plaüßen, R., production of lead acetate, (P.), B., 539*.

Plauson, H., disintegrating dry powders, (P.), B., 305*.

Plazek, E., and Suchard, E., synthesis of "6-thiopyridindotin," A., 1263.

Plenderleith, H. J. See Chapman, A. C.

Plimmer, R. H. A., action of nitrous acid on amides and other "amino"-compounds, A., 156.

Plimmer, R. H. A., and Rosedale, J. L., analysis of proteins. V. Van Slyke's method of determination of nitrogen distribution, A., 313.

analysis of proteins. VI. Distribution of nitrogen in the proteins of eggs, A., 313.

analysis of proteins. VII. Direct determination of arginine, A., 313.

vitamin-B and metabolism, A., 326.

Plinatus, V., dissolving and gelatinising cellulose esters such as nitrocellulose and like cellulose compounds, (P.), B., 315.

Plissov, A., action of sunlight on tetranirostilbene, A., 1029.

Plissov, A. See also Krassovski, K.

Ploeg, W., Friedel-Crafts reaction with keten, A., 614.

Ploetz, G. See Arndt, K.

Plotnikov, J., photo-oxidation of organic compounds by chromates, A., 253.

fundamental laws of photochemistry, A., 583.

photochemical reactions and methods of measuring them, A., 584.

Plotnikov, J., and Karschull, M., photochemical properties of chromates, A., 585.

photochemical properties of chromates and of other compounds, A., 1014.

Plotnikov, V. A., electrical conductivity of iodo-bromine solutions of potassium iodide, A., 679.

Intra-atomic condensation of matter, A., 881.

Plücker, W., Steinruck, A., and Stark, F., cocoa. I. Detection of shell, B., 105.

Pluhar, F. See Reiner, S.

Plummer, N. H., Deuel, H. J., jun., and Lusk, G., animal calorimetry. XXXIV. Influence of glycylglycine on respiratory metabolism of the dog, A., 1053.

Plummer, W. G., crystalline structure of hexachlorobenzene and hexabromobenzene, A., 13.

Plumstead, J. E., and Jessup & Moore Paper Co., de-inking paper stock, (P.), B., 534.

Plyler, E. K., infra-red absorption of brucite and some sulphates; isotopic effect, A., 990.

Pochwalski, J. See Dziewoński, K.

Podrouzek, V., reactions taking place in the preparation of colloidal copper by Bredig's method, A., 1003.

Podszus, E., obtaining powders of great fineness, (P.), B., 256*.

producing substances from boron and carbon, (P.), B., 539*.

Pochl, W. See Kehrmann, F.

Poehlmann, H. See Simon, A.

Pörsche, R., electrolyte for galvanic elements, (P.), B., 66*.

Poethke, W. See Paal, C.

Poetsch, G., and Behrend, R., action of formaldehyde on methylthiourea and its methyl ether, A., 739.

Poggi, R., derivatives of toluene, A., 159.

Poggi, R., and Polverini, A., destruction of filter-papers by alternate oxidising agents applied to quantitative analysis, A., 1018.

Pohl, R. See Thilenius.

Pohl, R. See Gudden, B.

Pohland, E. See Mark, H., and Stock, A.

Pohle, H., caoutchouc as a dispersion medium, B., 204.

colloid-chemical processes during hot vulcanisation, B., 554.

Pohorecka-Lelesz, B., micro-determination of urea in 0.1 c.c. of blood, A., 212.

micro-Kjeldahl method without distillation, A., 212.

simultaneous micro-determination of ammonia and carbamide by means of permute, A., 764.

Poindexter, F. E., mercury vapour pressure at low temperatures, A., 117.

vapour pressure of solid sodium and solid potassium amalgams, A., 897.

Poindexter, R. W., and California Cyanide Co., producing carbon and hydrocyanic acid, (P.), B., 88.

production of hydrocyanic acid, (P.), B., 583.

Poindexter, R. W., and California Cyanide Co., tricalcium cyanide, (P.), B., 822.

calcium cyanogen compounds, (P.), B., 946.

cyanide product [containing combined ammonia], (P.), B., 946.

Poirier, A., Stark effect for the anode rays of lithium, A., 875.

Pokorný, E., separation of copper and bismuth from molybdenite, (P.), B., 496.

purification of molybdenite containing copper and bismuth compounds, (P.), B., 591.

Pokorný, J., reducing power of sodium hyposulphite in alcoholic solution [and its use for bleaching silk], B., 10.

[printing] white and red discharges on indigo grounds, B., 437, 662.

formation of insoluble colours on cellulose acetate silk, B., 1010.

Pokorný, K. See Lierg, F.

Pokrowski, G. I., polarisation of light in sulphur suspensions, A., 779.

Polack, H. See Krause, E.

Pöhl, M., behaviour of neutral sodium caseinogenate in membrane hydrolysis, A., 671.

Pölcik, G. See Straehle, H.

Poldhütte. See Becker, E.

Poliakov, M., catalytic preparation of sulphuric acid, A., 918.

Pollan, F. L., bleaching of wool, silk, jute, etc. with sulphur dioxide, (P.), B., 872.

Pollan, L. F., production of gases resulting from the combustion of sulphur [for fumigation], (P.), B., 742.

Pollak, A., producing lactic acid and/or nitrogen-containing lactic acid compounds from sugar containing raw materials by means of micro-organisms, (P.), B., 73.

Pollak, F., analysis of mixtures of compounds of bremine, oxygen, and hydrogen, A., 1220.

treatment of condensation products of carbonide [carbamide] or its derivatives and formaldehyde, (P.), B., 22.

Pollak, F. See also Ripper, K.

Pollak, J. See Feigl, F.

Pollak, J. and Gebauer-Füllnegg, E., action of chlorosulphonic acid on phenols, II, A., 1244.

Pollak, J., Gebauer-Füllnegg, E., and Blumenstock, E., action of chlorosulphonic acid on phenols. II. Derivatives of resorcinol, A., 832.

Pollak, J., Gebauer-Füllnegg, E., and Ries, E., action of chlorosulphonic acid on phenols. I. Derivatives of the three cresols and phenol, A., 514.

Pollak, J. See also Strebinger, R.

Pollak, L., insulin content of pancreas of diabetics, A., 1054.

Polland, B., limit of absorption of the K-series of element 75 [rhodium], A., 1194.

Polland, W. B., action of mercuric nitrate on chloroauric acid, A., 487.

doubtful existence of auric oxide, A., 809.

Poller, K., Sakaguchi's colour reaction, A., 1284.

Poller, K. and Linneweh, W., occurrence of trimethylamine oxide in *Clupea harengus*, A., 857.

Polonovski, Max. and Polonovski, Michel, series of feebly toxic alkaloidal derivatives, A., 82.

amine-oxides of alkaloids. I., A., 1160.

Polonovski, Michel. See Polonovski, Max.

Polukarov, M. See Alexeï, D.

Pölicher, A. See Pögli, R.

Polysius, G., manufacture of fused cement and sulphur dioxide, (P.), B., 15.

manufacture of Portland cement from molten slag from gas producers and furnaces fired by pulverised coal, (P.), B., 363.

Polysius, G., Eisengiesserei & Maschinenfabrik, utilisation of liquid slag from gas producers and pulverised-fuel furnaces, (P.), B., 430.

Poma, G., preparation and separation of 1-aminonaphthalene-8- and -6-sulphonic acids, (P.), B., 185.

Pomeranz, H., influence of additions to the indigo vat, B., 913.

Pomerantseva, A. See Igarashie, N.

Pomilio, U., Giordani, F., and Pomilio Bros. Corporation, elimination of iron from solutions of leucite rocks, (P.), B., 13.

Pomilio, U. See also Giordani, F.

Pomilio Bros. Corporation. See Pomilio, U.

Pommé, J. See Nord-Deutsche Acetylen & Sauerstoffwerke A.-G.

Pomonis, C. See Courtot, C.

Ponce, H. P., "lecitiburin," a lecithin obtained from the eggs of the shark, A., 970.

Ponder, E., inhibition and acceleration of haemolysis, A., 751.

kinetics of haemolytic systems. I., A., 857.

equations applicable to simple haemolytic reactions, A., 909.

Ponder, E. and Kennedy, W. P., inhibitory effect of sugars on saponin haemolysis, A., 642.

Pongratz, A., and Zinke, A., quantitatively halogenising perylene, (P.), B., 974.

Pongratz, A. See also Zinke, A.

Ponndorf, W., reversible interchange between aldehydes or ketones and primary or secondary alcohol of their degree of oxidation, A., 520.

Ponomarev, J. F., constrained crystallisation of glasses, B., 877.

Ponomarev, N., and Terenin, A., optical excitation of zinc vapour, A., 766.

Pons, R., action of *Bacillus pestis* (Yersinia) on carbohydrates, A., 97.

Pontoppidan, C., mixing of pulverulent materials, (P.), B., 729*.

packing powdered material, (P.), B., 1000.

Pontremoli, A., duration of emission of monochromatic radiations and the mean life of the stationary states, A., 551.

Ponzo, G., dioximes. XXVIII., XXX., and XXXI., A., 295, 850, 1159.

Ponzo, G., and De Paolini, L., dioximes, XXIX., A., 825.

Ponzo, G., and Perolio, G., dioximes. XXVII., A., 308.

Pool, H. G. See Taylor, W. W.

Pool, H. J., elasticity of jellies of cellulose acetate in relation to physical structure and chemical equilibria, A., 353, 794*.

Popa, N. See Danaila, N.

Pope, E. J. See Canadian Press-Air, Ltd.

Pope, J. T., oil-shale retort, (P.), B., 147.

Pope, (Sir) W. J. See Kipping, F. B., and Mann, F. G.

Popelier, F., alkyl hydrogen sulphates, A., 1123.

Popencoe, C. H. See Siegler, E. H.

Popescu, D. See Ionescu, A.

Popov, L. L., manufacture of sodium dichromate, B., 946.

Popov, S., and McHenry, M. J., electrometric determination of alkaloids without the use of the hydrogen electrode, A., 750.

Popov, S. See also Gorr, W.

Popovic, G., conditions for the autolytic formation of ammonia in the tissues, A., 640.

Popp, A. See Speyer, E.

Poppenhnsen, H. A., combining molten metal with a gas, (P.), B., 674.

Popper, *H.*, action of adrenaline and related substances on the self-fermentation of yeast, *A.*, 95.
 Popper, *H.* See also *Disch, Z.*, and *Lieben, F.*
 Popper, *L.* See *Barrensheen, H. K.*
 Poppleford, *N.* See *Smith, W. S.*
 Porcher, *C.*, action of heat on the complex calcium caseinogenate + calcium phosphate; greater sensitivity of the phosphate micelles, *A.*, 677.
 change in the caseinogen constituent in the lime-caseinogen-calcium phosphate complex, and the influence of rennin on this complex, *A.*, 795.
 Porlezza, *C.*, and *Donati, A.*, autunite from Lurisia, *A.*, 143.
 Porlezza, *C.*, and *Gatti, U.*, action of calcium hydride on organic compounds. III. Acetophenone, *A.*, 837.
 Porlezza, *C.* See also *Nasini, R.*
 Porritt, *B. D.* See *Gallie, G.*
 Port, *J.*, action of neutral salts on the penetration of plant plasma by hydrogen and hydroxyl ions. I. and II., *A.*, 326, 645.
 Portal, *M. R.* See *Appleyard, K. C.*
 Porter, *C. R.* See *Morgan, G. T.*
 Porter, *C. W.*, and *Iddings, C.*, absorption spectrum and photochemical decomposition of acetone, *A.*, 222.
 Porter, *C. W.* See also *Ramspurger, H. C.*
 Porter, *F.*, vapour pressures and specific volumes of saturated ethane vapour, *A.*, 1000.
 Porter, *F.*, *Bardwell, D. C.*, and *Lind, S. C.*, photo- and radio-chemical interaction of hydrogen and chlorine, *A.*, 1111.
 all-glass circulating pump for gases, *A.*, 1223.
 Porter, *F.*, and *Perry, J. H.*, high vapour pressures of nitrogen, *A.*, 1000.
 Porter, *F.* See also *Perry, J. H.*
 Porter, *J.*, production of hydrogen by steam in a hot boiler tube, *B.*, 255.
 presence of air in pure and in alkaline water, *B.*, 301.
 Porter, *J. M.* See *Richardson, D. F.*
 Porter, *J. W.*, distribution of nitrogen in the flax plant and its elimination from flax during manufacture, *B.*, 911.
 Porter, *L. E.*, [colorimetric determination of] free chlorine in air, *A.*, 927.
 Porter, *R.*, *Whetzel, J. C.*, and *American Sheet and Tin Plate Co.*, removal of oxides from ferrous metal, *(P.)*, *B.*, 368.
 Porter, *R. E.*, direct measurement of plumping power of tan liquors; [report of committee of the American Leather Chemists' Association], *B.*, 926.
 Portevin, *A.*, striation due to working or to corrosion in microscopical metallography; mode of action of etching reagents, *B.*, 327, 792*.
 cold-deformation or corrosion fringes, *B.*, 328.
 Portevin, *A.*, and *Chevenard, P.*, influence of cold-working and quenching on the elastic properties of various metals and alloys, *B.*, 59.
 complexity of the phenomena of quenching of certain alloys, *B.*, 546.
 Portevin, *A.*, and *Le Chatelier, F.*, physical properties of very light magnesium alloys, *B.*, 280.
 Portevin, *A.* See also *Chevenard, P.*, and *Guillet, L.*
 Portillo, *R.*, oxalo-bismuthotartrates, *A.*, 939.
 complex bismuthotartrates, *A.*, 1025.
 Poschenrieder, *H.* See *Niklas, H.*
 Posejpal, *V.*, resonance absorption in the region of X-rays, *A.*, 216.
 quantitative experimental control of resonance absorption of X-rays, *A.*, 551.
 Posner, *T.*, [with Stockenschneider, *W.*, Neumann, *H.*, Nachring, *E.*, Meyer, *K.*, and Beissner, *E.*], indigo group. VI. Action of acid chlorides on Indigo-tin and its derivatives and the stereochemical formula for Indigo-tin, *A.*, 1155.
 Posner, *T.*, and Hofmeister, *R.*, indigo group. VII. Constitution of the vat dye, indigo-yellow 3 *G.* citra, *A.*, 1156.
 Posnjak, *E.*, stannic acids, *A.*, 1055.
 Possebisch, *F.* See *Chem. Fabr. Pott & Co.*
 Post, *C. I.* See *Nelson, J. M.*
 Post, *P.* "crylic" number of milk and milk products as a means to determine quantity of added water, *B.*, 846.
 Posternak, *S.*, partition of phosphorus between serum plasma and red blood-corpuscles, *A.*, 636.
 Postowsky, *J. J.* See *Fischer, Hans.*
 Potel, *A.* See *Deriveau, P.*
 Potter, *F. D.*, and *Combustion Control Co.*, apparatus for determining temperatures by carbon dioxide content of combustion gases, *(P.)*, *B.*, 429.
 Potter, *G. F.* See *Kraybill, H. R.*
 Potter, *H. H.* See *Sueksmith, W.*
 Potter, *H. V.* See *Fleet, W. F.*
 Pothoff, *E. H.* See *Leslie, E. H.*
 Poulson, *E.*, benzoylenglyconic ester, *(P.)*, *B.*, 771.
 Poulton, *E. P.*, *Spurrell, W. R.*, and *Warner, E. C.*, method of measuring directly the partial and total pressures of the gases of the blood, *A.*, 648.
 Ponmay, *A.*, cupola furnaces, *(P.)*, *B.*, 132.
 Pound, *A.* See *Glasstone, S.*
 Pound, *J. R.*, interfacial tensions between organic liquids and water or aqueous solutions, *A.*, 789.
 Povarnin, *G.*, and *Esrochi, J.*, changes in the "true tanning figure" during tannage, *B.*, 556.
 Povarnin, *G.*, and *Schichirev, J.*, examination of leather, *B.*, 683.
 Powell, *A. R.*, and *Schoeller, W. R.*, separation of tantalum and niobium and detection and determination of small quantities of tantalum in niobium compounds, *A.*, 377*.
 Powell, *E. B.*, soil core sampler, *B.*, 379*.
 Power, *A. D.*, fluorescence of cadmium vapour, *A.*, 109.
 Power, *F. B.*, and *Chesnnt, V. K.*, non-volatile constituents of the cotton plant, *B.*, 991.
 Power, *M. H.*, and *Upson, F. W.*, oxidation of dextrose by air in calcium hydroxide solution, *A.*, 274.
 Power Gas Corporation, *Ltd.*, and *Rambush, N. E.*, producing combustible gases and coke from bituminous fuel, *(P.)*, *B.*, 428.
 Power Specialty Co., vapour separation and condensation, particularly for use with [petroleum] oils, *(P.)*, *B.*, 230.
 Power Specialty Co. See also *Heenan, J. N. D.*, and *Primrose, J.*
 Powick, *W. C.*, inactivation of vitamin-A by rancid fat, *B.*, 382.
 Powick, *W. C.* See also *Hoagland, R.*
 Pozdnjakow, *N. M.* See *Tschitschibabin, A. E.*
 Pozniakov, *N.* See *De Procouidine-Gorsky, S.*
 Prache, *C.* See *Granger, L.*

Præstoring, *C.*, production of pure, water-white turpentine and pine oil, *(P.)*, *B.*, 22.
 Prager, *W.*, acetic or dichromate method [for glycerin analysis], *B.*, 923.
 Pragnéen, *G.* See *Westgren, A.*
 Prahl, *W.* See *Raschig, F.*
 Prandtl, *W.*, and *Duorue, H.*, solubility of double nitrates of praseodymium and neodymium with bivalent metals, *A.*, 345.
 Prandtl, *W.*, and *Hutterm, K.*, black oxides of praseodymium, *A.*, 137.
 Prang, *W.* See *Meerwein, H.*
 Prasad, *M.* See *Bhatnagar, S. S.*
 Prasad, *S.* See *Menon, A. S.*
 Prat, *S.*, polarographic methods in biology, *A.*, 1184.
 Prater, *T. H.*, coal-gas condensation, *B.*, 348.
 Pratt, *A. E.*, preparation of *d*-arginine carbonate, *A.*, 603.
 Pratt, *C. D.*, and *Atlas Powder Co.*, blasting-powder composition, *(P.)*, *B.*, 142, 804.
 Pratt, *D. D.* See *Nolan, T. J.*
 Pratt, *E. B.*, reduction of metal oxides, *(P.)*, *B.*, 415.
 Pratt, *M. F.* See *Conant, J. B.*
 Pratt, *R. S.*, standardisation of microscopical examination of Muntz metal alloys, *B.*, 883.
 "Prax" Chem. Versuchs- & Verwertungs-G.m.b.H., hydrogenation of naphthalene, *(P.)*, *B.*, 433.
 Pray, *H. A. H.*, stability of benzenediazonium chloride solutions. I. Reaction of benzenediazonium chloride with water, *A.*, 1214.
 Preble, *J. J.*, and *Spray Engineering Co.*, filter unit, *(P.)*, *B.*, 424.
 Predivoditelev, *A.*, variation of the density of a fluid with temperature, *A.*, 669.
 Predivoditelev, *A.*, and *Blinov, V.*, dependence of absorption coefficient on the thickness of the absorbing colour layer, *A.*, 15.
 Predivoditelev, *A.*, and *Joffe, G.*, influence of absorbed gases on the magnitude of the photo-electric effect, *A.*, 993.
 Predivoditelev, *A.*, and *Witt, A.*, photo-electric fatigue, *A.*, 330.
 Preiss, *P.*, removing phenol and/or its homologues from liquids such as waste waters on the like, *(P.)*, *B.*, 42.
 Prell, *E.* See *Pummerer, R.*
 Prentant, *M.* See *Dural, M.*
 Prentiss, *A. M.* See *Grablefield, G. P.*
 Prescher, *J.*, micro-reaction for cottonseed oil, *B.*, 592.
 Prescher, *J.*, and *Claus, R.*, examination of cacao-fat for alkalis and alkaline earths, *B.*, 285.
 use of sintered glass crucibles for the separation of digitoninsteride in the examination of fats for phytosterol, *B.*, 285.
 Prescott, *C. H. jun.*, equilibrium between zirconium oxide and carbon and their reaction products at incandescent temperatures, *A.*, 1209.
 Press, *A.*, elasticity coefficients and the thermodynamic integration factor for the solid state, *A.*, 895.
 Pressler, *E. E.*, and *Shearer, W. L.*, properties of potters' flints and their effects in white-ware bodies, *B.*, 540.
 Prest-O-Lite Co., *Inc.* See *Benner, R. C.*, *Ness, C.*, and *Weir, H. G.*
 Preston, *F. W.*, fundamental law of annealing [glass], *B.*, 89.
 Preston, *G. D.* See *Owen, F. A.*
 Prévost, *C.*, catalytic dehydration of alkylvinylcarbinols, *A.*, 496.
 two stereoisomeric α -ethylene γ -glycols, *A.*, 818.
 new erythritol, *A.*, 936.
 catalytic dehydration of α -unsaturated alcohols, *A.*, 1224.
 Prianischnikov, *D. N.*, decomposing action of peat on phosphorite, *B.*, 335.
 Prianischnikov, *D. N.*, and *Domontovitch, M. K.*, problem of a proper nutrient medium, *B.*, 641.
 Price, *E. A.* See *Carr, F. H.*, and *Cooking, T. T.*
 Price, *H. W.*, and *Huber Co., J. M.*, grading materials [carbon black], *(P.)*, *B.*, 505.
 Price, *J.*, and *Griscom-Russell Co.*, density regulator for concentrating evaporators [for brine], *(P.)*, *B.*, 875.
 Price, *J.* See also *Griscom-Russell Co.*
 Price, *T. W.*, decomposition of substituted carbamyl chlorides by hydroxy-compounds. II. Influence of the hydroxy-compound, *A.*, 481.
 Price, *W. A.*, relation of light to life and health, *A.*, 871.
 Pridaux, *E. B. R.*, and *Millott, J. O'N.*, action of hydrogen fluoride on compounds of selenium and tellurium. I. Selenium dioxide, *A.*, 258.
 action of hydrogen fluoride on compounds of selenium and tellurium. II. Tellurium dioxide, *A.*, 488.
 Pridaux, *E. B. R.*, and *Roper, E. C.*, hydrofluozirconic acid and the analysis of zirconium fluoride, *A.*, 587.
 Pridaux, *E. B. R.* See also *Laxton, F. C.*, *Roper, E. C.*, and *Taylor, W. W.*
 Priest, *I. G.*, computation of colorimetric purity, *B.*, 796*.
 Priebe, *H.* See *Schotte, H.*
 Prieschajew, *N.*, halogenated organic oxides; oxidation of α -chloro- α -heptene and β -chloro- α -octene by perbenzoic acid, *A.*, 383.
 Primrose, *J.*, and *Power Specialty Co.*, oil [cracking] still, *(P.)*, *B.*, 263.
 Prince, *A. L.*, and *Winsor, H. W.*, availability of nitrogen in garbage tankage and urea in comparison with standard materials, *B.*, 468.
 Prince, *G. W.*, *Douglas, A.*, and *United Verde Extension Mining Co.*, smelting furnace and method of smelting ores therein, *(P.)*, *B.*, 17.
 Princivalle, *E.* See *C. Gastaldi*.
 Pringsheim, *H.*, and *Beiser, A.*, separation of the enzymes of barley malt. II. Lichenase and cellobiose, *A.*, 976.
 Pringsheim, *H.*, and *stable γ -glucose*, *A.*, 1229.
 Pringsheim, *H.*, *Bonde, J.*, and *Leibowitz, J.*, reversion syntheses. II. Gentiofucose and isomaltose, *A.*, 1127.
 Pringsheim, *H.*, *Genin, A.*, and *Perewosky, R.*, separation of the enzymes of barley malt, *B.*, 104.
 Pringsheim, *H.*, and *Kolodny, S.*, stable γ -dextrose, *A.*, 822.
 Pringsheim, *H.*, and *Leibowitz, J.*, maltase from barley malt, *A.*, 202.
 relationship between optical rotatory power and structure in chemistry of the polysaccharides, *A.*, 275.
 starch. XVIII. Molecular size and association of polyamyloses, *A.*, 1128.
 Pringsheim, *H.*, and *Leibowitz, J.*, [with *Perewosky, R.*, and *Kusenack, W.*], starch. XV. Specific action of amylases, *A.*, 715.
 Pringsheim, *H.*, *Leibowitz, J.*, *Schreiber, A.*, and *Kasten, E.*, constitution of cellulose, *A.*, 942.
 Pringsheim, *H.*, and *Otto, G.*, complement of amylase. IV., *A.*, 864.
 Pringsheim, *H.*, and *Perewosky, R.*, inulin. V. Inulase, *A.*, 641.

Pringsheim, H., and Schapiro, E., starch. XVI. Fermentative degradation of starch by "biolase," A., 715.

Pringsheim, H., and Steingrover, A., starch. XVII. Amylobiose, A., 715.

Pringsheim, H., and Winter, M., complement of amylase. V. Sugar-protein condensation, A., 1274.

Pringsheim, H. See also Hudson, C. S.

Pringsheim, P., band fluorescence of potassium and sodium, A., 992.

Pringsheim, P., and Vavilov, S. J., polarised and unpolarised phosphorescence of solid solutions of dyes, A., 886.

Pringsheim, P. See also Orthmann, W.

Prins, E. C. See Hamburger, L.

Prins, H. J., mechanism of reduction. V. and VI., A., 33, 171.

preparation of $\alpha\beta$ -trichloro- and $\alpha\alpha\beta$ -tetrachloro-ethane, A., 268.

interaction (coaction) of molecules in termolecular reactions, A., 1009.

Prins, J. A., and Coster, D., higher order X-ray reflexions from fatty acids, A., 781.

Prinz, F. See Glaser, E.

Pritchard, D. A., economics of chlorine, B., 438*.

Pritchard, G. L., Henderson, H., and Gulf Refining Co., making chlorides [aluminum chloride], (P.), B., 273.

continuous catalytic distillation [of hydrocarbons], (P.), B., 131.

process of catalysing [hydrocarbon] oils, (P.), B., 622.

Pritchard, T. W., obtaining oil from oil sands, (P.), B., 147.

Pritzner, G., distilling bituminous fuels, (P.), B., 732.

Pritzker, J., and Jungkunz, R., natural and caffeine-free coffee, B., 605.

origin and detection of rancidity in fats and oils, B., 1020.

Prod. D. See Mazzucelli, A.

Probert, M. E. See Fargher, R. G., and LeComber, L. V.

Process Engineers, Inc. See De Cew, J. A.

Procopio, S., electrical conductivity of metals, A., 666.

Procter, F., chamomile (mayweed) and a taint in milk, B., 895.

Procter, F., and Mattick, A. T. R., alkaline milk and its detection by the bromo-cresol-purple test, I., B., 295.

Procter, J., brick kilns, (P.), B., 747.

Proctor & Schwartz, Inc. See Rhoads, T. H.

Prodor Fabr. de Prod. Organiques S.A., and Lévy, M., manufacture of hard pitch, (P.), B., 575.

Producers and Refiners Corporation. See Kauffman, H. L.

Proffitt, M. J. See Jackson, R. F.

Progress Akt.-Ges., manufacture of resinous condensation products from phenols and aldehydes, (P.), B., 889.

Prokopcuk, M. See Kozak, J.

Prophète, H., flower waxes: rose wax, A., 981, 1281.

Proskurnin, M. See Ivanitzkaja, A.

Proskurnina, N. See Stadnikov, G. L.

Pross, A. See Paal, C.

Prout, W. A. See Halsey, J. T.

Provine, R. W. See Wood, A. E.

Prucha, J. J., Widmer, J. M., and Penick & Ford, Ltd., purification of starch, (P.), B., 562.

Prudhomme, E. A., [production of gas containing] hydrogen for the hydrogenation of naphthalene, etc., (P.), B., 654.

Prudhomme, M., absolute critical temperatures. I. and II., A., 16, 162.

critical temperatures of silicon derivatives, A., 785.

Prüss, M., sewage purification plant, (P.), B., 302, 470.

Pružman, H. C. See Kritschevsky, W.

Pružman, P. W., Barton, P. D., and General Petroleum Corporation, removing acids from oils, (P.), B., 41.

Pružman, P. W., Bennison, A. D., and General Petroleum Corporation, purification of liquids by adsorption, (P.), B., 937.

Pružman, P. W., Bibra, C. J. von, and General Petroleum Corporation, treating [decolorising] oil, (P.), B., 41.

Pružman, P. W., and General Petroleum Corporation, treating oils, (P.), B., 41.

multiple-chamber filter press, (P.), B., 856.

process for decolorising and stabilising oils, (P.), B., 1006*.

Pryde, J., and Humphreys, R. W., nature of the sugar residue of the cerebrosides of ox-brain, A., 969.

Pryor, E. A. C. See United Glass Bottle Manufacturers, Ltd.

Prytherch, W. E., high-temperature resistance furnace, (P.), B., 19.

Pzydecki, S. J., breakdown of proteins in frogs after extirpation of the liver, A., 318.

is the degradation of uric acid by man an established fact? A., 1171.

catabolism of uric acid in vertebrates. I. and II., A., 1056.

Pucher, G. W., and Burd, L. A., post-mortem blood and spinal fluid, A., 315.

Pucher, G. W., and Day, H. A., colorimetric determination of hydroxylamine, A., 490.

Pucher, G. W. See also Sherman, O. H.

Puening, F., heating method and apparatus, (P.), B., 2.

furnaces for heating at low temperatures, (P.), B., 519.

Pützer, B. See Fischer, Hans.

Pützer, H. See Gewerkschaft Sachtleben.

Pugh, W., and Thomas, J. S., germanium. II. Germanium tetrachloride and its ammonia compounds, A., 695.

Pukall, W., drying of ceramic ware, B., 878.

Pulay, E., and Richter, M., mineral content of the blood. I. Effect of adrenaline on the blood-calcium, A., 1179.

Pulevka, P., horn-dissolving action of alkali sulphides, A., 853.

Puis, K. See Chem. Fabr. Kunheim & Co.

Pumpher, R. See Rhenania Verein Chem. Fabr. A.-G.

Pumpher, R., separation of caoutchouc hydrocarbon from rubber latex and its fractionation, B., 597.

preparation of condensation products of phenols or phenol ethers and azo-compounds, (P.), B., 817.

Pumpher, R., and Dally, M., reaction between azobenzene hydrochloride and phenol, A., 1133.

Pumpher, R., Prell, E., and Rieche, A., preparation of dinaphthylene dioxide, A., 1135.

Pumpher, R., and Rieche, A., oxidation of phenols. IX. Aromatic peroxides with univalent oxygen, A., 1135.

Pungs, E., removal of nitration acids from nitrocellulose, (P.), B., 613.

Pennett, R. F., and Eastman Kodak Co., light-sensitive photographic materials, (P.), B., 1030*.

Purdy, A. C. See Orndorf, W. R.

Purdy, R. C., influence of chemistry on ceramics [during the past fifty years], B., 824*.

Pure Coal Briquettes, Ltd. See Sutcliffe, E. R.

Purgotti, A., naphthalene-2 : 7-dicarboxylic acid and its derivatives, A., 951.

Puri, A. N. See Singh, B. K.

Purkayastha, R. M. See Ghosh, J. C.

Purse, W. L. See Firth, J. B.

Purves, C. B. See Gilchrist, H. S.

Purvis, J. E., influence of different nuclei on the absorption spectra of substances, A. 108.

absorption spectra of various derivatives of salicylic acid, A., 557.

influence of soft and of hard waters on the decomposition of sewage, B., 725.

Pushin, N. A., influence of pressure on equilibria in binary systems. II. Urethane-benzene, A., 246.

influence of pressure on equilibria in binary systems. III. *m*-Chloronitrobenzene, *m*-bromonitrobenzene, and their mixtures at high pressures, A., 578.

Pushin, N. A., and Grebenshchikov, J. V., influence of pressure on equilibria in binary systems. I., A., 126.

Pushin, N. A., and Löwy, S., diagrams of state for binary systems of which arsenic tribromide is one component, A., 357.

Pushin, N. A., and Vilovitsch, F., equilibrium diagrams of binary systems containing benzoic acid as one component, A., 245.

Putochkin, N., compounds of the pyrrole and indole series and isomerisations in these series, A., 1151.

Putochkin, N., [with Lissizin, M. A.], preparation of diamines and amino-alcohols, A., 602.

Putt, E. B., converting vegetable fibre to pulverised form, (P.), B., 188.

phenolphthalein, (P.), B., 463.

Puttaert, H. F. J. See Puttaert, J. F.

Puttaert, J. F., and Puttaert, H. F. J., making pulp from [rice] hulls, (P.), B., 661.

Puxeddu, E., essential oils of Sardinian aromatic plants. III. Essence of *Thymus herba barona* and of *Thymus capitatus*, B., 930.

Pye, D. R. See Tizard, H. T.

Pye, H. T., a-ray track projector, A., 1076.

Pyl, G. See Sprengstoffwerke R. Nahnsen & Co. A.-G.

Pyman, F. L., dyes from the alkaloids of ipecacuanha, A., 531.

Pyman, F. L. See also Forsyth, R., Jones, E. C. S., and Nimkar, V. K.

Fyne, G. See Reilly, J.

Pyzel, D., and Simplex Refining Co., process of distillation [of oils], (P.), B., 42*.

pressure still for oil refining, (P.), B., 397.

apparatus for refining [petroleum] oils, (P.), B., 574.

still for cracking [petroleum] oils, (P.), B., 941.

Q.

Quarendon, R. See Bone, W. A.

Quararoli, A., autocatalysis with varying catalyst; biperiodic febrile reactions, A., 133.

Quarzampen-Ges.m.b.H., exposure of liquids to ultra-violet rays, (P.), B., 247.

Quasi-Arc Co., Ltd., and Strohmenger, A. P., electrode for use in electric arc welding and the cutting of metals, (P.), B., 984.

Quast, H. See Abderhalden, E.

Quastel, J. H., dehydrogenations produced by resting bacteria. IV. Theory of the mechanism of oxidations and reductions *in vivo*, A., 434.

Quastel, J. H., and Stephenson, M., "strict" anaerobes. I. Relationship of *Bacillus sporogenes* to oxygen, A., 1177.

Quastel, J. H., and Woolf, B., equilibrium between *L*-aspartic acid, fumaric acid, and ammonia in presence of resting bacteria, A., 868.

Quetlet, R., derivatives of *p*-bromoallylbenzene, A., 719.

Quoneau, A. L. J., retorts for destructive distillation or heat treatment of solid materials, (P.), B., 118.

automatically cleaning the interior walls and moving parts and adjuncts of retorts while in operation, (P.), B., 575*.

feeding and discharging of retorts for distillation or other purposes, (P.), B., 675*.

Quenau, A. L. J., and Heisch, E., retort for carbonisation of solid fuels, (P.), B., 6*.

Querig, E., sulphoselenium from volcano (Aeolian Islands), A., 42.

stibolismuthinite, A., 1022.

Quick, A. J., conjugation of benzoic acid in the dog; determination of hippuric acid, A., 639.

β -D-glycuronic acid monobenzoate (benzoylglycuronic acid), A., 1056.

production of conjugated glycuronic acids in depauperated dogs, A., 1169.

origin of glycuronic acid in the organism, A., 1271.

Quicentsky, H. See Späth, E.

Quig, J. B., and Wilkinson, J. A., preparation of disilicon hexachloride, A., 539.

Quigley, J. F., and Minerals Separation North American Corporation, differential coal flotation, (P.), B., 971.

Quilico, A., X-ray examination of metallic hydrides; copper hydride, A., 996.

Quincke, (Fr.), See Fraenkel, W.

Quinn, E. J. See Sherman, H. C.

Quintin, (Mile) M. See Audibert, R.

Quarforst, S., relation between coal analysis and carbonisation products, B., 1001.

Qvist, W., determination of phenol in crude cresol, B., 624.

R.

Raabe, W., multichamber apparatus for conducting leaching, washing, or like operations on solid or semi-solid material [e.g., removing sugar from plant cuttings], (P.), B., 459.

Raalf, H. See Levy, P.

Raalst, A. ton, new value in the examination of fat mixtures and butter, B., 563.

Razaf, F., transformation of fibrolite, A., 379.

Rabald, E., influence of gelatin on the potential and discharge potential of zinc in zinc sulphate solution, A., 804.

conversion of mercurous into mercuric chloride [on keeping], A., 810.

Rabe, H., manufacture of carbon disulphide, B., 874.

Rabi, I. I., spinning electrons, A., 881.

Rabinerson, A., reciprocal action between colloidal solutions. I. Relation between mutual flocculation, protective action, and sensitisation in the reciprocal action of two soils, A., 795.

Rabinovitch, I. M., origin of urinary ammonia. III, A., 1053.

Rabinovitch, R., coagulation of blood; effect of p_{H} , dialysis, and electrodialysis on the coagulation of fibrinogen, A., 1267.

Rabinovitch, E., additivity of the molecular volumes of volatile inorganic compounds, A., 226.

 krypton and xenon content of the air, A., 808.

Rabinovitch, E. See also Paneth, P.

Rabinovitsch, M., electrical conductivity of dielectrically individual compounds and metalloidal elements. I., II., and III., A., 359, 360.

Rabinovitsch, M. See also Wöhler, L.

Rabinowitz, I. See Hill, A. J.

Rabkin, J. See Margulis, S.

Rail, C. R. H. See Bernhardt, H.

Radicliffe, L. G., and Chadderton, E., geraniol and its determination; notes on citroellol, B., 849.

Radelet, A. H. See Stander, H. J.

Rader, E. See Joret, G.

Radford, W. H. See Laxton, F. C.

Radio-Röhren-Lab. C. Nickel Ges.m.b.H. See Edison Swan Electric Co., Ltd.

Radium and Rare Earths Treatment Co., and Cooke, W. T., treatment of solutions containing ferric sulphate, titanium sulphate, and free sulphuric acid, (P.), B., 744.

 recovery of vanadium from ilmenite, (P.), B., 756.

Radovanovich, H. Sec Goldstein, H.

Raduner & Co. Akt.-Ges., finishing textile materials, (P.), B., 403.

 manufacture of fibrous materials, (P.), B., 1010*.

Rae, J., testing *Spi. Aether Nit.*, B., 75.

Rae, J. See also Abraham, A. C.

Raeber, H. See Mieg, W.

Räth, S. See Blinz, A.

Raffineries Internationale de Soufre, apparatus for continuous distillation of sulphur, (P.), B., 360.

Raffin, R., regulation of acid-base equilibrium; search for a criterion for the study of epilepsy, A., 637.

 relation between ammonia and acid in urine, A., 858.

Raisky. See Rafton.

Rafton, H. R., [filler and coating for] paper, (P.), B., 913.

Ragatz, R. A., and Hougen, O. A., protecting thermocouples by transparent silica tubes, B., 695.

Ragatz, R. A., and Kowalke, O. J., Thomas gas calorimeter; factors affecting its precision, flexibility, and reliability, B., 970.

Rage, J. J., centrifugal apparatus for treatment of sugar liquors, etc. (P.), B., 72.

Ragg, M., water-line paints [ships "boat-topping"], B., 553.

Ragg, M. See also Rafton, F.

Ragg, W. G. See Gidden, W. T.

Rahder, H., copal melting and the copal-melting process in closed kettles, B., 551.

Rahn, F. See Boehringer Sohn, C. H.

Rahrs, E. J. See Clarke, H. T.

Raihnen, F., and Ragg, M., manufacture of pigments, (P.), B., 1020.

Raiford, L. C., and Clark, E. P., behaviour of mixed O-acyl-N-acyl derivatives in which the reacting groups are not on adjacent carbon atoms, A., 517.

Raiford, L. C., and Colbert, J. C., effect of substituents in the formation and reactions of certain ethers, A., 1242.

Raikes, H. R., Yorke, A. F., and Ewart, F. K., equivalent conductivity of solutions of sodium hydroxide and the mobility of the hydroxyl ion, A., 477, 679.

Raikes, H. R. See also Ewart, F. K.

Railsback, J. B., method of electrolytically producing aluminium, (P.), B., 163.

Rainchon, L., gas-producer furnaces, (P.), B., 731*.

Rainey-Wood Process Corporation. See Heffner, Le R. W.

Raison, J., bleaching sole leather, (P.), B., 683.

Raijiss, G. W., and Fisher, B. C., N-acyl derivatives of 3-amino-4-hydroxy-phenylarasinic acid, A., 627.

Raijiss, G. W., Severac, M., and Moetsch, J. C., bacterial chemotherapy with reference to mercury dyes, A., 320.

Raijiss, G. W. See also Abbott Laboratories.

Rajagopalan, M. See Watson, H. E.

Rakovski, V. See Stadnikov, G. L.

Rakuzin, J. N., molecular contraction in solutions at different temperatures, A., 788.

 determination of total alkaloids, sugar, and oily substances in opium, B., 994.

Rakuzin, M. A., optical rotation of arabic acid and the alkali arabinates, A., 111.

 magnesium hydroxide as antidote to poisoning by mercuric chloride, A., 640.

Rakuzin, M. A., and Brodski, D. A., dehydration of metallic salt hydrates. I. Dehydration of sodium borate, carbonate, and sulphate, B., 1011.

Rakuzin, M. A., and Mischkeleison, B. E., legumin of sweet almonds, B., 510.

Rakuzin, M. A., and Nesmejanov, A. N., negative adsorption. VIII. Behaviour of kaolin towards aqueous solutions of alcohol and salts, A., 119.

 sodium pyroborate monohydrate, A., 260.

Rakuzin, M. A., and Pekarskaja, G., legumin, B., 460.

Rakuzin, M. A. See also Zelinski, N. D.

Ralls, J. O., Jordan, C. N., and Doisy, E. A., extraction of ovarian hormone and some chemical properties of the product, A., 1064.

Ralph, W. M., and National Aniline and Chemical Co., 4-nitro-1-acetonaphthalide-6 (or 7)-monosulphonate, (P.), B., 185.

Ralph, W. M. See also Derick, C. G.

Ralston, O. G. See Maier, C. G.

Ram, A. See Dunnill, H. B.

Ramachandran, S., reaction between bismuth trisulphide and hydrochloric acid, A., 137.

Ramage, A. S., and Ozonid Corporation, oxygen compounds of terpene, (P.), B., 610.

Raman, C. V., birefringence of crystalline carbonates, nitrates, and sulphates, A., 994.

Raman, C. V., and Banerji, K., optical properties of amethyst quartz, A., 115.

Raman, C. V., and Krishnan, K. S., electrical polarity of molecules, A., 998.

Ramanathan, K. R., structure of molecules in relation to their optical anisotropy, A., 226.

Ramanathan, K. R., and Srinivasan, N. G., optical anisotropy of some simple inorganic gaseous compounds, A., 336.

Ramart, (Mme.) P., alkylation of aliphatic nitriles; preparation of di- and tri-alkylacetonitriles, A., 718.

Ramart, (Mme.) P., and Amagat, molecular transpositions in the $\alpha\alpha\alpha$ -alkyl-diarylethanol series, A., 710.

Ramart, (Mme.) P. See also Bardon, (Mme.).

Ramayyar, C. S. See Hutchinson, C. M.

Ramberg, L., distillation of hydrochloric acid and nitric acid, A., 236.

Rambush, N. E. See Power Gas Corporation, Ltd.

Ramdas, L. A., origin of the movements of camphor on water, and other allied phenomena, A., 1095.

Ramén, A., treatment of ores or other materials with liquids, (P.), B., 495.

 treatment of solid materials with liquids; [precipitation of copper with scrap iron], (P.), B., 673.

Ramon, G. See Berthelot, A.

Ramsay, H. G. A. See Stockholms Superfosfat Fabr. Aktiebolaget.

Ramsay, R. K., and Mayhew, M. J., grinding, milling, and pulverising apparatus, (P.), B., 80.

Ramsdell, L. S., crystal structure of some metallic sulphides, A., 228.

Ramsden, C. E., paving and surfacing material, (P.), B., 129, 918*.

Ramsden, W., physical properties of composite surfaces, A., 1094.

Ramsperger, H. C., and Porter, C. W., ultra-violet absorption spectrum [and dissociation] of formic acid, A., 659.

Ramstetter, H. See Badische Anilin- & Soda-Fabrik.

Randall, J. T. See James, R. W.

Randall, M., freezing-point lowering at infinite dilution, A., 1207.

Randall, M., McBain, J. W., and White, A. M., activity coefficient of soap solutions, A., 1208.

Randall, M., and White, A. M., activity coefficient of electrolytes from the vapour pressure of the solvent, A., 1208.

Randies, F. S., and Knudson, A., cholesterol. I. Synthesis of cholesterol in the animal body, A., 429.

Randon, L., Alquier, J., Asselin, and Charles, reproduction, growth, and alimentary equilibrium, A., 208.

Randon, L., and Leocoq, R., inequality in content of water-soluble vitamin-B of yeast extracts of different origin, A., 871.

 is the water-soluble vitamin-B of brewer's yeast derived from the culture medium? A., 871.

Randon, L., and Lelesz, E., B-avitaminosis, glycemia, and glycogen reserves, A., 437*.

Randon, L., and Michaux, A., glycogen reserves and arterial sugar (free and combined with protein) in experimental scurvy, A., 207.

Randolph, D. W., and Donnenwirth, A. L., hydrogen-ion measurements on clay slips, B., 823.

Randomot Dyeing Machine Corporation, apparatus for colouring portions of yarn in mass, (P.), B., 1011*.

Raney, M., preparing [nickel] catalytic material, (P.), B., 81.

Rang, E. J., properties of mild steel at high temperatures, B., 1016.

Ranker, E. R., determination of total nitrogen in plants and plant solutions, A., 1068.

Rankin, J. See Haworth, R. D.

Rankine, A. O., effect of temperature on viscosity of air, A., 671.

 sensitivity of selenium cells, A., 815.

Ranwez, G., washing minerals or coal, (P.), B., 264*.

Rao, B. S., essential oil from the flowerheads of *Perovskia atriplicifolia*, Benth., B., 803.

Rao, B. S., Shintre, V. P., and Simonsen, J. L., essential oil from the wood of *Erythrorhynchus monogynus*, Roxb., B., 1028.

Rao, B. S., and Simonsen, J. L., occurrence of sylvestrene, A., 72, 521.

Rao, B. S. See also Panicker, P. M. B.

Rao, K. A. N. See Forster, M. O.

Rao, K. R. See Narayan, A. L.

Rapatz, F., cutting power of high-speed steel tools and methods of testing, B., 823.

Raper, H. S., tyrosinase-tyrosine reaction. V. Production of L-3:4-dihydroxy-phenylalanine from tyrosine, A., 977.

Raper, H. S., and Smith, E. C., insulin and the production of acetone substances by the perfused liver, A., 1278.

Raper, H. S., and Speakman, H. B., tyrosinase-tyrosine reaction. IV. Identity of tyrosinase from different sources, A., 431.

Raper, H. S. See also Clutterbuck, P. W.

Raper, H. See Mills, W. H.

Raposo, B. See Ageno-Valla, E.

Raque, D., decomposition of the alkaline-earth phosphates by alkali carbonates, A., 136.

 sensitivity of certain reagents with strontium and calcium ions, A., 262.

 preparation of salts of strontium free from barium and calcium, B., 629.

 preparation of calcium salts free from barium and strontium, B., 629.

 preparation of pure barium salts, B., 629.

Rashevsky, N. (on), principles of the thermionic effect, A., 330, 1188.

 Heisenberg's quantum mechanics, A., 1192.

Raschig, F., constitution of aldehyde and ketone hydrogen sulphite compounds A., 598.

 action of stannous chloride on nitrous acid, A., 1016.

 chemistry of the lead chamber process [of making sulphuric acid], B., 11.

 working-up of crude ammoniacal liquor, (P.), B., 236.

 wood preserving, (P.), B., 241.

 production of alkali salts of chloroimidodisulphonic acid, (P.), B., 876.

Raschig, F., and Prahl, W., constitution of aldehyde and ketone hydrogen sulphites, A., 939.

 supposed potassium hydroxymethanesulphonate of Max Müller, A., 1123.

Raschig, M. See Heller, G.

Raschke, B. See Gelsenkirchener Gussstahl & Eisenwerke A.-G., Abt. Stahlwerke Krieger.

Rasetti, F., activated fluorescence and the Döppler effect, A., 776.

Raska, F., preparation of bone-meal for medicaments, (P.), B., 218.

Rasmussen, H. B., and Christensen, C. E., use of sodium borate solution in the volumetric determination of weak bases, A., 1221.

Rasquin, H., solidified tung oil, B., 201.

 new methods of varnishing with cellulose esters, B., 450.

Rasquin, H. See also Elbner, A.

Rassow, H. See L. G. Farbenind. A.-G.

Rath, J. See L. G. Farbenind. A.-G.

Rather, J. B., and Standard Oil Co. of New York, desulphurising petroleum oils, (P.), B., 526.

Rather, H. See Hesse, L.

Rather, F., and Levina, L., effect of nickel and cobalt salts on certain diabetics, A., 971.

Rathsburg, H., manufacture of detonating compositions, (P.), B., 468*. primer composition, (P.), B., 603.

Ratig, See Kali-Ind. A.-G.

Ratoczyn Extended Oil Fields, Ltd. See Lamplough, F.

Rattew, W. H. J. See Bradley, W.

Rattray, D. S., automatic continuous percolator [for extraction of drugs], B., 802.

Rau, M. G., and Simonsen, J. L., constituents of some Indian essential oils. XVIII. Derivatives of abietic acid, A., 1246.

Rauchenberger, W. See Schlubach, H. H.

Kaue, F., metabolism of bilo acids. I. Determination of bile acids, A., 763.

Raum, H., principles of the manuring of meadows, B., 601.

Raux, J. See Petit, P.

Ravensway, (Mits) H. J., determination of zinc as acetate, A., 1019.

Ravinetti, G., purification of fats, (P.), B., 795.

Ravner, O., and Norske Aktieselskab for Elektrokem. Ind., condensing zinc vapour, (P.), B., 97.

Ravner, O. See also Mejell, T.

Rawdon, H. S., protection of iron by cadmium, B., 243.

Rawdon, H. S., and Epstein, G., phosphorus in wrought iron, B., 669.

Rawling, F. G., prevention of corrosion in steel digesters [for wood pulping], (P.), B., 152.

Rawling, F. G. See also Rue, J. D.

Rawling, S. O., arrest of development in [photographic] plate testing, B., 467. thiocarbamide fog and a suggested explanation of Waterhouse reversal, B., 721.

Rawling, S. O., and Glassett, J. W., sensitivity of photographic emulsions. I. Effect of changing hydrogen-ion concentration during the washing and digestion stages, B., 1029.

Rawlings, F. I. G., present status of theory and experiment relating to specific heats and the chemical constant, A., 567.

chemical constants of the halogen hydrides, A., 1087.

Rawson, A. E. See Morgan, G. T.

Ray, A. B., production of coloured smoke signals, B., 221.

Ray, A. B., and Carbide and Carbon Chemicals Corporation, porous mass [for absorbing acetylene], (P.), B., 119.

Ray, B. See Nishina, Y.

Ray, J. N. See Perkin, W. H., jun., Ray, R. M., and Sen, M.

Ray, P., and Ray, S. N., complex iodates of tin and antimony, A., 1015.

Ray, (Sir) P. C., history of oxygen, A., 591.

Ray, (Sir) P. C., and Bose-Ray, K. C., trichalcene trisulphide and 1:4-dithian, A., 1023.

lengthened chain compounds of sulphur, A., 1023.

Ray, (Sir) P. C., and Guha, B. C., synthesis of condensed heterocyclic systems; interaction between 2:5-dithiol-1:3:4-thiodiazolo and organic dihalides, A., 744.

Ray, (Sir) P. C., Guha, B. C., and Bose-Ray, K. C., varying valency of platinum with respect to mercaptan radicals, 111, A., 1023.

Ray, R. M., and Ray, J. N., lactic esters derived from phenacyl bromide by condensation with ethyl sodium malonate and analogous substances, A., 168.

Ray, S., transformation of a line spectrum into a continuous spectrum by transmission through a solution of certain critical densities, A., 1192.

Ray, S. N. See Ray, P.

Rayleigh, (Lord), selective action of polarised light on starch grains, A., 135.

nature of active nitrogen, A., 336.

continuous spectrum of mercury vapour in relation to the resonance line 2535-52, A., 875.

spectroscopic studies on the luminous vapour distilled from metallic arcs, A., 876.

Raymond, C. A. See Folsom, R. M.

Raymond, F. I., and Raymond Bros. Impact Pulverizer Co., pulverising mill, (P.), B., 520.

Raymond Bros. Impact Pulverizer Co., [regulating feed to] pulverising mills, (P.), B., 178*.

Raymond Bros. Impact Pulverizer Co., and Crites, J., pulverising, feeding, and burning fuel, (P.), B., 117.

Raymond Bros. Impact Pulverizer Co., Crites, J., and Vogel, W. H., pulverising mills, (P.), B., 648.

Raymond Bros. Impact Pulverizer Co., Lauritzen, C. M., and Vogel, W. H., pulverising mills, (P.), B., 856.

Raymond Bros. Impact Pulverizer Co. See also Crites, J., and Raymond, F. I.

Raynaud, A., uranyl oxalate, A., 147.

bromination of zinc in the presence of different solvents, A., 486.

Raines, J. L., bleaching of wool with sulphur dioxide and sulphurous acid and presence of carbonyl group in wool, B., 871.

Razubaiyan, G. See Ipatiev, V. N.

Read, A. M., pulverising mill, (P.), B., 999.

Read, A. M. See also Fisher, D. T.

Read, H. S., effect of temperature on X-ray absorption, A., 551.

Read, J., and Cook, (Mits) A. M. R., menthone series. I., A., 174.

Read, J., Cook, (Mits) A. M. R., and Shannon, (Mits) M. I., menthone series. III. Optically inactive menthylamines, A., 1147.

Read, J., and McMath, A. M., diagnosing potential optical activity. II. Optical activity of chlorobromoacetic acid, A., 1024.

optical resolution of chlorosulphoacetic acid, A., 1025.

Read, J., and Robertson, G. J., menthone series. II. Optically active menthones and menthylamines, A., 1147.

Read, J. See also Carter, P. G., and Earl, J. C.

Read, J. B., Coolbaugh, M. F., and Complex Ores Recoveries Co., sulphating process for ores and concentrates, (P.), B., 406*.

Read, J. B. See also Coolbaugh, M. F.

Read, R. R., and Foster, L. S., *n*-butylbenzene, A., 827.

Read, R. R., and Freer, R. M., electrolytic reduction of acraldehyde, A., 714.

Reads, T. H., quaternary ammonium perhalides, A., 1232.

Reade, T. H. See also Aitkin, M. F.

Reader, E. C., drying apparatus, (P.), B., 472.

Reader, V., lipochromes present in certain bacteria, A., 201.

Reavell, J. A., rotary drying machine, (P.), B., 696*.

Reay, G. A. See Havard, R. E.

Rebber, L. L., and Union Oil Co. of California, preparing "castor" machine oils, (P.), B., 575.

Reber, E. See Bamberger, E., and Society of Chemical Industry in Basle.

Rebor, J. W. See Woodall-Duckham (1920), Ltd.

Rebert, C. See Frossard, J.

Rebmann, O. See Dimroth, O.

Reboul, G., analysis at reduced pressure of radiation emitted by pastilles of high electrical resistance, A., 1072.

Recha, W., continuous production of anhydrous sodium sulphate, (P.), B., 487.

Record, S. J., lapachol, A., 1281.

Recordon, C. E., Hille, J. W., and Air Reduction Co., liquefaction of gases, (P.), B., 81.

Recoura, A., compound of chromium sulphate with acetic acid, A., 1237.

Reddie, J. A., activated [sewage] sludge experiments at Bradford, B., 169.

Redfield, A. C., Coolidge, T., and Hurd, A. L., transport of oxygen and carbon dioxide by bloods containing haemocyanin, A., 1050.

Redfield, A. C., and Medaris, D. N., content of lactic acid and development of tension in cardiac muscle, A., 1056.

Redfield, A. C. See also McIvor, M. A.

Redina, L., reciprocal effect of sodium, potassium, and calcium ions on the weight of animals on an artificial diet, A., 1272.

Redlich, O., theory of electrolytic conductivity A., 910.

Redlich, V., centrifugal machines, (P.), B., 775.

Redman, K., and Sturtevant Co., B. F., drying moisture-containing materials, (P.), B., 808.

Redman, L. V., electrolysis of acid solution of copper sulphate, A., 130.

Reed, C. I., and Tweedy, W. R., physiological action of light. VII. Blood calcium in direct irradiation of blood, A., 541.

Reed, C. I. See also Falk, I. S., and Koch, F. C.

Reed, G. B., autolytic and bacterial transformation of fish-muscle proteins, B., 509.

Reed, W. R. See Lange, N. A.

Reed Air Filter Co., and Hegan, C. P., air-cleaning [filter] materials, (P.), B., 2*.

Reebs, L., absorption refrigerating apparatus, (P.), B., 1000*.

Rees, H. G. See Mastin, H.

Rees, W. J. See Clark, F. G., and Hugill, W.

Reesons, J. N., and Moss, W. L., purifying coal or other gases, (P.), B., 430.

Reeve, H. T., and Western Electric Co., method of making cores for cathodes of vacuum tubes, (P.), B., 135.

Reeve, L. See Cunliffe, P. W.

Reeves, H. G., and Hewitt, J. A., effect of glyceraldehyde and dihydroxyacetone on insulin hypoglycemia, A., 1063.

Reeves, T. W. See Earl, A. R.

Regal, A., manufacture of artificial resins, (P.), B., 596, 714*, 797*.

Regan, J. C., and Tolstouhov, A., characteristic changes in blood chemistry in whooping cough, A., 538.

significance of blood chemical changes in pertussis, A., 971.

Roge, R. B., industrial wastes as manures. I. Ajowan and mohua cakes as fertilisers. II. Utilisation of refuse, B., 335.

Regener, E., sub-electron, A., 1191.

Regenerative Coal Gasification System, Ltd. See Travers, M. W.

Reggiani, G. See Giua, M.

Reglin, W., determination of the covering power, opacity, and grain size of paints, B., 333.

Regnault, H. See Chevalier, J. M. A.

Rehberg, P. B., kidney function. I. Rate of filtration and reabsorption in the human kidney. II. Excretion of urea and chlorine analysed according to a modified filtration-reabsorption theory, A., 858.

determination of chlorine in blood and tissues by micro-titration, A., 984.

Rehbinder, P., surface activity of water; surface activity and adsorptive forces, II., A., 674.

Rehren, (Frl) I. See Sentileben, H.

Rehwinkel, W. See Geldel, J.

Reich, G. T., recovery of alcohol, organic acids, and fertiliser from fermented saccharine materials, (P.), B., 992.

Reich, H. See Braun, J. von.

Reichard, O., determination of citric acid and the results of experiments with wine, B., 687.

Reichan, K. H., porcelain for high-tension insulators, B., 158.

apparatus for washing clay, (P.), B., 241.

Reichel, E., isomorphous relationship of cuprous and silver halides, A., 562.

Reichenstein, D., theory of static and dynamic displacement, A., 130.

Reichstein, S. See Frumkin, A.

Reichstein, T., [3:5-dinitrobenzoyl] chloride and anthraquinone- β -carboxyl chloride in qualitative organic analysis, A., 1226.

Reid, (Mits) B. M. See Burton, E. F.

Reid, E. F. See Huber, F. C., Lawson, W. E., Moses, C. G., Palmer, G. D., and Shaw, E. H., jun.

Reid, E. L. See Bendixen, N.

Reid, G. H. See Kohler, E. P.

Reiff, G., application of phosphotungstic and phosphomolybdate acids to the determination of uric acid in milk and blood, A., 212.

determination of tannic acid in fermentation vinegar, B., 25.

direct and indirect methods for the determination of dry matter, and the determination of sugar in vinegar, B., 25.

toxicity, detection, and determination of methyl alcohol, B., 642.

Reighard, T. H., [dutile] alloy, (P.), B., 711.

Reihlen, H., *cis-trans*-isomerism of co-ordinatively quadrivalent complex salts, A., 457.

danger of mercury vapour, A., 815.

stereochemistry of platinous salts, A., 888.

Reihlen, H., and Nestle, K. T., *cis-trans*-isomerism in platinous salts, A., 699.

determinations of mol. wt. in liquid ammonia and the mol. wt. of inulin, A., 783.

Reilly, J., and Bastible, (Mits) H. E., velocity of formation of 3:5-dimethyl-pyrazole-4-diazonium chloride, A., 1156.

Reilly, J., and Drumm, P. J., aminopropyl-1:2:4-triazoles, A., 961.

Reilly, J., Drumm, P. J., and Boyle, C., essential oils from Irish-grown plants. I. Oil of lavender, B., 462.

Reilly, J., and Madden, D., velocity of decomposition of heterocyclic diazonium salts. I. Diazonium salts of the pyrazole and pyrazolone series, A., 181.

Reilly, J., and Pyne, G., peat. I. Thermal decomposition of peat under reduced pressure, B., 906.

Reilly, P. C. See Derby, I. H.

Reimer, M., additive reactions of unsaturated α -ketonic acids, A., 1139.

Reina, G. See Natta, G.

Reinan, E. H., carbon dioxide and plant production, B., 558.

Reinbold, Herm., and Reinbold, Hugo, medium for bleaching, cracking, and desulphurising petroleum and other hydrocarbon compounds, (P.), B., 8, 231.

Reinbold, *Hermann*, and Reinbold, *Hugo*, process for treating alumino-silicates [for use in softening water], (P.), B., 254.

Reinbold, *Hugo*. See Reinbold, *Hermann*.

Reinbold, *H.*, dialysis and ultrafiltration, A., 120.

Reindel, *F.*, and Rosendahl, *F.*, 3 : 3-dibromopyriminazol-2-one [3 : 3-dibromo-2-keto-2 : 3-dihydropyriminazole] and attempts to prepare 2 : 3-diketo-2 : 3-dihydropyriminazole, A., 743.

Reinders, *W.*, electric charge of colloid particles, A., 352.

Reinecke, *W.* See Wever, *F.*

Reiner, *H. C.* See Wilkins, *S. D.*

Reiner, *L.*, principles of electro-dialysis, and a simple apparatus, A., 1205.

Reiner, *M.*, flow of an elastic liquid through a capillary; theory of viscosity measurements, A., 678.

Reiner, *S.*, theory of "structural turbulence," A., 1199.

Reiner, *S.*, laboratory electric furnace for temperatures up to 1400°, A., 1021.

determination of water in mineral oils, B., 146.

influence of state of subdivision [of rubber] on the period necessary for extraction with acetone [to determine resin], B., 288.

corrosion of metals by insulating pastes, B., 636.

[X-ray] interference phenomena in stretched rubber, B., 956.

Reiner, *S.*, Pluhar, *F.*, and Hány, *B.*, coagulation of proteins in drops. VIII. Differences in the coagulation of pure serum and serum from haemolysed blood of the horse, ox, pig, and dog, A., 751.

Reinert, *M.* See Mahn, *J.*, and Ruggli, *P.*

Reinhard, *M. C.* See Riegel, *F. R.*, and Stenström, *W.*

Reinheimer, *M.*, manufacture of safety paper, (P.), B., 401.

Reinicke, *A.*, Stintzing's hypothesis of the structure of atomic nuclei, A., 773.

Reinitzer, *B.*, and Conrat, *F.*, volumetric determination of chromium and manganese with permanganate in acetic acid solution. I. Chromium, A., 492.

volume determination of chromium and manganese with permanganate in acetic acid solution. II. Manganese, A., 705.

Reinitzer, *F.*, coniferyl reaction of some resins, B., 987.

Reinikober, *O.*, infra-red spectra of solutions, A., 108.

new residual rays and overtones of residual rays, A., 1190.

Reinwein, *H.*, sputum, A., 1052.

Reis, *A.*, stereochemistry of molecular structure, A., 934.

relationship between molecular and crystal structure, A., 934.

Reis, *A.* See also Eisenschitz, *R.*

Reisener, *H.* See Remy, *H.*

Reissert, *A.*, and Lemmer, *F.*, α -anilino- α -nitrophenylacetoutrile and its transformations, A., 628, 625.

Reissmann, *E.*, temperature of the vapour evolved from solutions, A., 787.

Reissmann, *E.* [with Schreber], temperature of steam evolved from a [boiling aqueous] solution, A., 21.

Reissner, *H.*, deduction of the essential properties of nucleus and electron from the metric-electromagnetic field, A., 218.

Reitmaier, *O.*, fertiliser, (P.), B., 71.

Reitstötter, *J.*, and Lasch, *G.*, electrolytic concentration of protein solutions and hydrophilic colloids, A., 352.

Reitstötter, *J.* See also Eggert, *J.*

Reitter, *F.* See Eibner, *A.*

Reitz, *A.*, production of silicon carbide from silicic acid and charcoal, (P.), B., 916.

Reitz, *H.* See Chem. Fabr. Griesheim-Elektron.

Rekord Cement Ind. G.m.b.H., and Tetens, *O.*, production of hydraulic cement from oil shale and limestone, (P.), B., 918.

Reliance Gauge Column Co. See Brown, *J. R.*

Reichert, *E. W.*, and Haslam, *R. T.*, mechanism of combustion in the Bunsen cone, B., 82.

factors influencing length of a gas flame burning in secondary air, B., 83.

factors affecting utility of secondary air in gaseous combustion, B., 83.

relative rates of combustion of constituents of city gas burning in secondary air, B., 83.

Remesov, *N.*, liming and the nitrate of soils, B., 415.

Remy, *F. G. P.*, and Dunstan, *A. E.*, purification of liquids [hydrocarbon oils], (P.), B., 352.

Remington, *J. S.*, conditioning of wheat, B., 563.

Remy, *H.*, the hydrate problem. III. Electroendosmosis and the electrolytic transport of water, A., 128.

ruthenium, A., 1219.

apparatus for separation of solid materials by means of liquid currents, (P.), B., 112.

absorption of chemical fogs, B., 255.

Remy, *H.*, and Gönnenming, *H.*, catalytic activity of contact substances. III. Catalysis of detonating gas at high temperatures by metals inactive at the ordinary temperature and binary alloys from group 8 of the periodic system, A., 134.

Remy, *H.*, and Reisener, *H.*, the hydrate problem. IV. Adsorption of electrolytes by parchment paper and electroendosmosis, A., 1201.

Rendi, *O.* See Dischendorfer, *O.*

Renner, *H.*, and Forest Products Research Corporation, dyeing wood, (P.), B., 241.

Renshaw, *A.*, and Ashcroft, *G. V.*, four cases of poisoning by chloronitrobenzene and one by acetonilide, occurring in a chemical works, B., 265.

Renshaw, *A.* See also British Dyestuffs Corporation.

Renshaw, *R. R.*, and Bacon, *N.*, basis for the physiological activity of -onium compounds. VI. Rates of hydrolysis of certain esters of choline and its analogues, A., 805.

Renshaw, *R. R.*, Bacon, *N.*, and Roblyer, *J. H.*, basis for the physiological activity of -onium compounds. VI. Sulphur analogue of choline, A., 497.

Renshaw, *R. R.*, and Hotchkiss, *H. T.*, *jun.*, basis for the physiological activity of -onium compounds. VII. Derivatives of betaines, A., 1232.

Renshaw, *R. R.*, and Ware, *J. C.*, basis for the physiological activity of -onium compounds. III. Choline derivatives, A., 155.

Renshaw, *R. R.* See also Bencowitz, *I.*

Rentschler, *H. C.* See Westinghouse Lamp Co.

Renwick, *F. F.* See Baldsiefen, *W. D.*

Resan Kunstrarzerzeugungsges. m.b.H., production of coloured, transparent, resinous condensation products from phenols and formaldehyde, (P.), B., 890.

Research Corporation. See Clevenger, *G. H.*, and Wintermantel, *H. A.*

Resegotti, *G.*, crystallographic study of certain aromatic nitro-derivatives, A., 1195.

Restaino, *S.* See also Carobbi, *G.*, and Zambonini, *F.*

Rettenmaier, *See Lenze, F.*

Rettig, *F.* See Scheibler, *H.*

Reuscher, *F.* See L. G. Farbenind. A.-G.

Reutter, *J.* See Braun, *J. von*.

Revello, *M.* See Sensi, *G.*

Reverdin, *F.*, *p*-anisylurethane and its nitration products, A., 1243.

Reverey, *G.* See Windaus, *A.*

Rey, *G.* See Mounier, *L.*

Rey, *J.*, amount and distribution of light emitted by carbons of high luminous intensity used in projection, B., 97.

Reychler, *A.*, photochemical studies. VI. Mechanical actions on the photographic plate, B., 219.

photochemical studies. VII. Physical development of the latent image, B., 515.

photochemical studies. VIII. Chemical development of the latent image, B., 515.

Reyerson, *L. H.*, preparation of an ash-free wood charcoal, A., 38*.

Reyerson, *L. H.*, and Thomas, *K.*, catalysis by metallised silica gel, A., 1012.

Reyer, *R.* See Chem. Fabr. Griesheim-Elektron.

Reyhart, *A. F. A.* See Bösesken, *J.*

Reynolds, *C.* See Halsey, *J. T.*

Reynolds, *D. A.* See Davis, *J. D.*

Reynolds, *H. H.*, and Bigelow, *L. A.*, preparation of quinizerin, A., 521.

Reynolds, *N. B.* See Found, *C. F.*

Reznikoff, *P.*, micrurgical studies in cell physiology. II. Action of chlorides of lead, mercury, copper, iron, and aluminium on the protoplasm of *Amoeba proteus*, A., 1173.

Reznikoff, *P.* See also Chambers, *R.*

Rhead, *T. F. E.*, factors affecting carbonisation in continuous vertical retorts, B., 369.

Rhead, *T. F. E.*, and Jefferson, *R. E.*, testing for refractoriness and after-contraction and experiences with refractories in vertical [gas] retorts, B., 410*.

Rheinboldt, *H.*, composition and structure of organic molecular compounds, A., 782.

nitrosoimercaptides and thionitrites, A., 819.

Rheinboldt, *H.*, [with Hennig, *K.*, and Kircheisen, *M.*], binary systems. I. The "thaw-melt" diagram, A., 25.

Rheinboldt, *H.*, and Kircheisen, *M.*, veranol-pyramidone and "veramone," A., 78*.

binary systems. II. Thermal diagram for partly miscible pairs, A., 476.

binary systems. III. "Thaw-melt" diagrams for systems with mixed crystals, A., 308.

binary systems. IV. The "thaw-melt" diagram as a micro-method, A., 1001.

Rheinfelder, *L.*, application of the Bergius process to coal tar, B., 780.

Rheinische Eisengiesserei und Maschinenfabrik Akt.-Ges., production of castings containing silicon, (P.), B., 282.

Rheinische Kampfer-Fabrik G.m.b.H., Skraup, *S.*, and Steinruck, *K.*, diazotisation of aminophenols, (P.), B., 867.

Rheinische Maschinenfabrik, grinding and drying materials, (P.), B., 729*.

Rheinische Metallwaren & Maschinenfabrik, means for automatically interrupting the current in electric furnaces if a fault occurs in an electrode, (P.), B., 98*.

melting light metals, aluminium, magnesium, or their alloys in an induction furnace, (P.), B., 246.

Rheinische Metallwaren & Maschinenfabrik. See also Kostka, *F.*

Rhenania Verein Chemische Fabriken Akt.-Ges., utilisation of the gases evolved in the concentration of sulphuric acid for the preparation of sulphuric acid, (P.), B., 125.

process of producing alkali aluminates, (P.), B., 708.

decomposition of gypsum, (P.), B., 788.

Rhenania Verein Chemische Fabriken Akt.-Ges., and Brenek, *H.*, manufacture of manures, (P.), B., 71.

Rhenania Verein Chemische Fabriken Akt.-Ges., and Frank, *W.*, manufacture of sulphuric acid, (P.), B., 320.

Rhenania Verein Chemische Fabriken Akt.-Ges., and Martin, *F.*, manufacture of hydrogen peroxide, (P.), B., 127.

Rhenania Verein Chemische Fabriken Akt.-Ges., Marwedel, *J.*, and Looser, *J.*, removing sulphur from technical barium carbonate, (P.), B., 630.

Rhenania Verein Chemische Fabriken Akt.-Ges., Marwedel, *J.*, and Scholz, *W.*, treatment of alkaline-earth sulphides, (P.), B., 52.

Rhenania Verein Chemische Fabriken Akt.-Ges., and Mendheim, *H.*, utilisation of residues from sodium sulphide manufacture, (P.), B., 192.

Rhenania Verein Chemische Fabriken Akt.-Ges., and Fulvermüller, *K.*, recovery of mercury in carotting hair, (P.), B., 871.

Rhenania Verein Chemische Fabriken Akt.-Ges., and Rüsberg, *F.*, working up barium sulphide, (P.), B., 322.

separation of barium chloride from solutions, (P.), B., 788, 915.

products from barium sulphide, (P.), B., 822.

Rhenania Verein Chemische Fabriken Akt.-Ges., Rüsberg, *F.*, and Klüg, *A.*, production of barium salts, (P.), B., 52.

Rhenania Verein Chemische Fabriken Akt.-Ges., and Stuer, *B.*, production of pure hydroxides of barium or strontium, (P.), B., 946.

Rhenania Verein Chemische Fabriken Akt.-Ges. See also Rüsberg, *F.*, and Wöhler, *F.*

Rhoads, *T. H.*, and Proctor & Schwartz, Inc., drying clays and similar materials, (P.), B., 667.

Rhodes, *E.*, and Woodman, *R. M.*, fatty substances of the plant growing point, A., 761.

Rhodes, *F. H.*, and Cooper, *J. D. jun.*, effect of yellow and brown iron oxide pigments upon the rate of oxidation of linseed oil, B., 99.

Rhodes, *F. H.*, and Fonda, *J. S.*, factors determining the brightness and opacity of white paints, B., 287.

Rhodes, *F. H.*, and Goldsmith, *H. E.*, effect of various carbon pigments upon the rate of oxidation of linseed oil, B., 679.

Rhodes, *F. H.*, and Mathes, *R. A.*, effect of zinc oxide pigments upon rate of oxidation of linseed oil, B., 201.

Rhodes, *F. H.*, Welles, *J. H.*, and Murray, *G. W.*, vapour-composition relationships in the systems phenol-water and phenol-cresol, A., 17.

Rhodes, *O. S.*, test to distinguish between viscose and cuprammonium artificial silks, B., 187.

Rhodes, *P. W.* See Durant, *H. T.*

Rhodin, *B. E. F.*, extracting or refining magnesium, (P.), B., 134*.

Rhodin, *J. G. A.*, and Westman, *E. B. Ltd.*, finishing cotton yarn, (P.), B., 914.

Rhys-Davies, *W.*, rancidity and oxidation of fatty oils in regard to wool lubrication, B., 630.

Riaboushinski, *N. P.* See Smorodinev, *I. A.*

Rial, W. D., preparing a lubricating oil, (P.), B., 701.

Rial, W. D. See also Black, J. C.

Ribas, I., and Fournéau, E., preparation of pure *a*-monochlorohydrin, A., 711.

Ribaud, G., high-frequency-induction electric furnace for very high temperatures, B., 64.

influence of exterior temperature on the temperature of standard pyrometric [electric] lamps, B., 303.

theoretical study of the yield of the high-frequency electric furnace with alternating current, B., 834.

Ribbeck, F., dependence of the electrical resistance of nickel steel on composition, temperature, and heat treatment, B., 949.

Ricaleins, E., felting process for woollen and like textile fabrics, (P.), B., 782.

Ricard, Allenet & Co., acceleration of vulcanisation of rubber, (P.), B., 289.

Ricard, M. See Camichel, C.

Ricca, B., preparation of cyanogen, A., 489.

preservation of gaseous cyanogen, A., 489.

Rice, A. C., Fogg, H. C., and James, C., phenylarsinic acid as a reagent for the determination of zirconium and thorium, A., 593.

Rice, C. E., destruction of cockroaches and devitalisation of their eggs by cyanogen chloride mixture, B., 30.

Rice, F. E., and Miscall, J., sweetened condensed milk. IV. Refractometric method for determining total solids, B., 600.

Rice, F. O., catalytic activity of dust particles, A., 917.

Rice, G. P., isomeric esters of *p*-phenoxybenzoylacrylic acid, A., 270.

Rice, G. S., and Wheeler, R. V., stone dust as a preventive of coal-dust explosions, B., 178.

Rice, J., radiation theory of chemical reaction, A., 585*.

Rice, O. K., equilibrium in colloid systems, A., 352.

surface tension of charged surfaces, A., 1202.

Rich, G. R., heat-resisting alloy steel, (P.), B., 17.

Rich, J. P., method of hydrating lime, (P.), B., 126.

Rich, M. N. See Westinghouse Lamp Co.

Richard. See Petit, P.

Richard, P., testing for the presence of barium chloride in calcium chloride, B., 786.

Richards, A. N. See Wear, J. T.

Richards, E., melting grey cast-iron in the electric furnaces, B., 321.

Richards, H. F. See Evans, B. S.

Richards, O. W., nomogram for the van't Hoff-Arrhenius temperature equation, A., 1102.

Richards, T. W., history of investigation of internal pressures, A., 143.

Richards, T. W., and Hall, L. P., atomic weight of uranium lead and the age of an especially ancient uraninite, A., 449.

Richards, T. W., King, H. S., and Hall, L. P., attempts to fractionate mixed isotopes of lead, and the atomic weight of this metal, A., 771.

Richards, W. J., effect of α -particles on supersaturated solutions, A., 1190.

Richardson, A. S., and Snoddy, A. O., hydrogenation of cottonseed oil with platinum; heterogeneous catalysis. III., B., 678.

Richardson, D. F., Emley, W. E., and Porter, J. M., hydrating lime for bleach [bleaching-powder] manufacture, B., 125.

Richardson, D. H., action of alcoholic potassium hydroxide on chloronitrobenzene, A., 515.

manufacture of phenacetin from *p*-chloronitrobenzene, B., 689.

Richardson, G., manufacture of barium sulphide [and lithopone], (P.), B., 788.

Richardson, G. A. See Palmer, L. S.

Richardson, H. B., Levine, S. Z., and Du Bois, E. F., clinical calorimetry. XLI. Storage of glycogen in exophthalmic goitre, A., 637.

Richardson, H. K., and Westinghouse Lamp Co., aluminium alloy and method of manufacture, (P.), B., 674.

Richardson, H. L. See Farmer, E. H.

Richardson, L. T., and Cutler-Hammer Manufacturing Co., furfuraldehyde-acetone resins, (P.), B., 590.

Richardson, O. W., [spinning electrons], A., 551.

structure in the secondary hydrogen spectrum. IV., A., 873.

secondary hydrogen spectrum, A., 873.

Richardson, S. G. See David, W. T.

Richardson, W. D., and Swift & Co., food product, (P.), B., 993.

Riche, C., Gardner, and Goodbody, effect of zirconium, titanium, and manganese salts on nutrition, A., 197.

Riche, C., jun., and Minet, basal urea excretion, A., 1053.

Richmond, E. A. See Smith, L. B.

Richmond, H. A., Macdonald, J. jun., and General Abrasive Co., artificial aluminous abrasive, (P.), B., 543.

Richmond, H. D., and Eggleston, J. A., analysis of acetic anhydride, B., 645.

Richmond, H. D., and England, E. H., analysis of glacial acetic acid, B., 645.

Richmond, T. E. See Whiting, A. L.

Richter, A. F., foundation of the expressions $r_{(n)}$ and $r_{(p)}$, A., 1007.

Richter, F., interaction of chloroacetyl chloride and aceto-*m*-toluidide, A., 1132.

Richter, F., and Wolff, W., catalytic isomerisation of pinene, A., 1148.

Richter, G. See Kuhn, A.

Richter, G. A., and Brown Co., process for producing chemical wood pulp, (P.), B., 1009.

making sulphite cooking liquors, (P.), B., 1014.

Richter, G. A., Schurz, M. O., and Brown Co., manufacture of high *a*-cellulose fibre, (P.), B., 1010.

Richter, G. A., Swasey, S. L., and Brown Co., recovering calcium carbonate from caustic liquors, (P.), B., 665.

Richter, G. A., Van Arsdel, W. B., and Brown Co., recovery of sulphur dioxide from blow-off gases, (P.), B., 1014.

Richter, H. E. See Wittig, G.

Richter, K. See Kötz, A.

Richter, M. See Pulay, E.

Richtmyer, F. K., apparent shape of X-ray lines and absorption limits, A., 103.

magnitude of the K-absorption discontinuity, A., 216.

Riddle, F. H., manufacture of ceramic bodies, (P.), B., 1014.

Riddle, F. H., and Peck, A. B., an eighteen months' high-temperature test on refractory test specimens, B., 240.

Rideal, E. K., influence of thin surface films on the evaporation of water, A., 119.

present position in photochemistry, A., 583.

physical phenomena and molecular orientation, A., 1093.

Rideal, E. K., and Hirst, H. S., chemical effects produced by resonance radiation, A., 486.

Rideal, E. K., and Wright, (Miss) W. M., low-temperature oxidation at charcoal surfaces. II. Behaviour of charcoal in presence of promoters, A., 919.

Rideal, E. K. See also Adams, R., Hirst, H. S., Lewis, B., Schofield, R. K., and Willey, E. J.

Rideout, W. H., separating molybdenum from orcs, (P.), B., 63.

Rider, D., Watts, J. S., and Thermal Industrial and Chemical (T.I.C.) Research Co., Ltd., heating liquids by introduction into molten metal, (P.), B., 1000*.

Rider, D. See also Thermal Industrial and Chemical (T.I.C.) Research Co., Ltd.

Ridge, H. M., brick-making, (P.), B., 362.

Ridgway, A. E., heating of heavy tars and bitumens in connexion with the treatment of roads, (P.), B., 364*.

Riding, R. W. See Baly, E. G. C., and Morton, R. A.

Riebeck'sche Montanwerke Akt.-Ges., A., purification of hydrocarbons, (P.), B., 574.

refining of mineral oils, (P.), B., 574.

production of substances resembling fatty acids [oleine substitute], (P.), B., 887.

Riehl, R. See De Vries, O.

Rieche, A., micro-apparatus for the determination of mol. wt. by elevation of the b. p., A., 1118.

Rieche, A. See also Pumpherer, R.

Riechers, F., manufacturing plate glass, (P.), B., 668*.

Riede, W., carbon dioxide fertiliser, B., 960.

Riedel, F., recovery of sulphur from gases, (P.), B., 488.

Riedel, J. D., Akt.-Ges., motor fuel, (P.), B., 117.

manufacture of preparations which evolve carbon dioxide when heated or dissolved in water, (P.), B., 297.

production of catalysts for hydrogenation processes, (P.), B., 346.

manufacture of pure alumina, (P.), B., 406.

preparation of dicyclic bases, (P.), B., 513.

preparation of a Bz-tetrahydrohydroxyquinoline, (P.), B., 513.

solvent for extracting resins and fats, (P.), B., 597.

preparation of substituted ketopolyhydroanaphthalenes, (P.), B., 610.

preparation of *N*-alkylated aromatic amines, (P.), B., 771.

method of combating plant diseases, (P.), B., 813.

purification of low-boiling hydrocarbons, (P.), B., 861.

fuel for internal-combustion engines, (P.), B., 1004.

Riedel, J. D., Akt.-Ges., and Hueter, R., manufacture of hydrogen bromide, (P.), B., 787.

Riedel, J. D., Akt.-Ges., and Rosenbusch, R., preparation of glycerophosphates, (P.), B., 385.

Riedel, J. D., Akt.-Ges., and Schroeter, G., preparation of phenolic derivatives of tetrahydropaphthalene, (P.), B., 216.

Riedel, L. See Zschimmer, E.

Rieder, M. See Kehrmann, F.

Riegel, E. R., and Reinhard, M. C., ultra-violet absorption of a series of eight organic substances of the 4-pyridone type, in water solution, A., 734.

Riehm, H., determination of nitrate in soils by means of the diphenylamine reaction, B., 1024.

Rieke, R., relationship between the constitution and the properties of porcelain, B., 511.

Rieke, R., and Samson, K., translucency of porcelain, B., 511.

Riemann, A., photo-luminescence of benzene and some derivatives in different states of aggregation and of solution, A., 660.

Riemer, H., splitting oils and rendering them odourless, particularly marine animal oils, (P.), B., 200.

autoclave fat-splitting, B., 286.

Rienacker, G. See Zind, E.

Rienacker, W. See Tammann, G.

Riera, J. F., manufacture of synthetic emerald stones, (P.), B., 586.

Rieri-Werk E. Richter, preparation and application of an adsorption agent for the purification of alcohols and oils, (P.), B., 295.

Ries, E. D., and Clark, J. E., analysis of sulphur dioxide in the presence of excess air, B., 706.

Ries, P. See Hauts-Fourneaux & Aciéries do Differdange-St.-Ingbert-Rumelange Soc. Anon.

Riesenfeld, E. H., [with Petrich, W. J.], sulphito-amminocobaltates, A., 259.

Riesenfeld, E. H., and Haase, W., vapour-pressure measurements on pure ozone, A., 117.

thermal formation of ozone, A., 124.

Riesenfeld, E. H., and Grunthal, E., stability and decomposition products of thiosulphuric acid, A., 267.

Riesenfeld, E. H., and Gündel, H. von, formation of ozone and hydrogen peroxide in the oxy-hydrogen flame, A., 697.

Riesenfeld, E. H., and Haase, W., distillation of mercury containing gold, A., 264.

[transformation of mercury into gold], A., 922.

Kieser, A. See Blanck, E.

Rieser, O., nitrogen output of isolated frog's muscle under the action of substances causing contraction, A., 319.

Ries, E. See Pollak, J.

Rietschel, O., photo-electric effect in very high vacuum and its dependence on the pressure, A., 653.

Rigby, T., manufacture of cement, (P.), B., 129.

evaporator for concentrating or drying, (P.), B., 305*.

drying process and apparatus, (P.), B., 521*.

treatment of peat for removal of water, (P.), B., 861.

Rigby, T. M., rubber latex compositions [distempers mixed with rubber latex], (P.), B., 167*.

Riggs, E. J. See Glassstone, S.

Rigler, R. See Löffer, E.

Riber, C. N., and Minasas, J., mutarotation. VII. Third modification of galactose, A., 1228.

Rijks, H. J. See Waterman, H. J.

Rijn, P. J. van, action of sodium ethoxide on *s*-trichlorodinitro- and -trinitrobenzene and of hydroxylamine on *s*-trinitrotrimethoxy(phenoxy)benzene, A., 510.

nitration of 2 : 4 : 6-trimethylpyridine (collidine), A., 525.

Riley, A. See Baddiley, J., and British Dyestuffs Corporation, Ltd.

Riley, F., machines for dyeing and similarly treating fabrics, (P.), B., 945*.

Riley, H. L., and Baker, H. B., atomic weight of silver by the direct ratio of silver to oxygen in silver oxide, A., 1190.

Riley, J., and Sons, Ltd., and Bentley, W. H., manufacture of pure sulphur, (P.), B., 666.

Riley, R. S., and Sanford Riley Stoker Co., pulverising machine, (P.), B., 305*.

Riley, W. A. See Merz & McLellan.

Rimington, C., and Kay, H. D., phosphorus compounds of milk. II. Liberation of phosphorus from caseinogen by enzymes and other agents, A., 970.

Rimini, G., colloidal gold and an organic gold compound obtained biochemically, A., 792.

Riurott, E. See Ruff, O.

Rinau, W. See Haagen & Rinau.

Rinde, H., determination of the adsorption of ions on colloidal particles by means of Donnan's membrane equilibrium theory, A., 347.

Rinehart, H. W., β -hydroformamino cyanide, A., 1236.

Ringsom, A. See Hägglund, E.

Ringer, A. J. See Harris, M. M.

Rinzer, W. E., and Grütterink, B. W., effect of p_u on the proteolytic activity of papain, A., 977.

Rinkenbach, W. H. See Taylor, C. A.

Rinnan, E. L., utilisation of sulphite-cellulose waste liquor, (P.), B., 153.

Rinna, F., X-ray investigation of some finely-divided minerals, artificial products, and dense rocks, A., 229.

discussion of fine structure and X-ray methods with regard to optical anomalies [of crystals], A., 459.

flow of natural salts, A., 461.

relation between fine-structure and optical anomalies, A., 1085.

Rinne, F., and Gräfe, R., chemical effects with crystals. VIII. Etching and solution phenomena with borax, A., 562.

Rintoul, W., and White, A. G., ignition of firedamp by momentary flames. II., B., 730.

Rioch, M. G., and Cameron, A. T., pernicious anæmia. II. Chloride metabolism in the anæmias, especially pernicious anæmia, A., 1269.

Rioch, M. G. See also Cameron, A. T.

Ripke, O. See I. G. Farbenind., A.-G.

Ripp, B., formation of caramel substances in the presence of nitrogenous compounds, B., 961.

Rippl, A., utilisation of thiocarbamide by *Aspergillus niger*, A., 204.

carbon dioxide and plant yield, B., 378.

experimental proof of the incorrectness of the Mitscherlich-Baule law connecting yield with growth factors, B., 1024.

variability of the effect constant ("Wirkungsfaktor") in growth curves, B., 1024.

Rippl, A., and Ludwig, O., nitrogen: base ratio in Leguminosæ and Gramineæ, A., 439.

physiological equilibrium in plants; production of solid matter and the absorption of nitrogen in *Helianthus annuus*, L., with different amounts of nitrogen supply, A., 1280.

Rippl, A., and Pollak, F., applying metallic coatings to porous [non-metallic] bases, (P.), B., 61*.

Risch, C., micro-determination of the oxygen content of water, A., 140.

Rish, J. See Bistrayki, A.

Rising, M. M., and Hicks, J. S., determination of small quantities of water in methyl alcohol, A., 967.

Risler, J., preparation of luminescent discharge tubes of helium, B., 636.

Rissegem, H. van, 4th and 4th-hexenes, A., 1224.

Riss, Fraser & Co., Ltd., and Fraser, A., colloid mills, and drying, concentrating, mixing, emulsifying, grinding, and like machines, (P.), B., 80.

Ristau, K. See Wolf, L.

Ritsert, K. See Mannich, C.

Ritter, E. See Kali-Forschungs-Anstalt G.m.b.H.

Ritter, F. See Treff, W.

Ritter, G. See Stock, A.

Ritter, G. J., distribution of lignin in wood, A., 53*.

Ritter, G. J., and Fleck, L. C., chemistry of wood. VIII. Further studies of sapwood and heartwood. IX. Spring wood and summer wood, B., 660.

Rittmann, R., determination of very small quantities of guanidine by means of the nephelometer, A., 967.

Rittmann, R. See also Petschacher, L.

River Smelting and Refining Co. See Utley, H. H.

Rivett, A. C. D., possible error in the calc-spar determination of hydrochloric acid, A., 690.

constitution of magnesium acetate solutions, A., 681.

Rivett, A. C. D. See also Packer, J.

Rivière, G., and Pichard, G., relative loss of weight of white Calville apples during storage, B., 605.

Riwlin, R., adsorption by an optical method; fixation of methylene-blue by yeast-phosphoprotein sol within the disperse phase, A., 1092.

Riwlin, R. See also Fodor, A.

Robar, R. C. insecticide or fumigant and fumigating method, (P.), B., 664.

Robart, J., solubility of sucrose in impure solutions, B., 169.

Robbins, B. R. See Ingrossell, A. W.

Robbins, H. B., MacMillan, H. J., and Bosart, L. W., amounts of soap and "builder" necessary to soften water of different degrees of hardness, B., 222.

Robbins, W. J., and Scott, J. T., isoelectric points for plant-tissue, A., 209.

Robbins, W. K., textile dyeing [during the past fifty years], B., 820*.

Robel & Fiedler G.m.b.H., preserving vulcanised rubber, (P.), B., 289.

Roberts, A., and Chicago Trust Co., coke-ovens, (P.), B., 699.

Roberts, A. L. See Woodvine, G. R.

Roberts, E., and Turner, E. E., 10-chlorophenothiarsine, and its rate of formation from *o*-phenylthiophenyl dichloroarsine, A., 852.

Roberts, E., Turner, E. E., and Bury, F. W., ar-chlorotetrahydroarsinoline and some quaternary arsonium compounds, A., 852.

Roberts, E. See also Child, T. B.

Roberts, K. C., action of metals on dipentene dihydrohalide; preparation of a synthetic diterpene, A., 72.

[attempted] synthesis of *apo*-fenchocamphoric acid; preparation of $\alpha\alpha$ -dimethyl- γ -carboxyadipic acid, A., 1125.

Robertson, A., and Robinson, R., synthesis of anthocyanins. I. A., 956.

synthesis of pyrrolidine salts of anthocyanidin type. IX. Hydroxydavulyn salts, A., 1042.

Robertson, A. See also Henderson, G. C.

Robertson, A. C., promoter action in homogeneous catalysis. III. Cobalt salts as promoters in the catalytic decomposition of hydrogen peroxide by potassium dichromate, A., 917.

Robertson, G. J. See Irvine, (Sir) J. C., and Read, J.

Robertson, H. M. See Meehan, P. A.

Robertson, J. K., method for exciting spectra of certain metals, A., 550.

Robertson, J. M., caryophyllene alcohols and their occurrence in nature, A., 1012.

Robertson, J. M. See also Andrew, J. H., Gibson, D. T., and Henderson, G. G.

Robertson, K. J. R. See Carrier Engineering Co., Ltd.

Robertson, T. B., permeability of polarised membranes in relation to the permeability of the nucleus and the proportions of the various amino-acids which are contained in proteins, A., 972.

Robeson Process Co. See Blackadder, T.

Robikoff, W. See Loukinsky, V.

Robinson, A., and Simon-Carves, Ltd., coal washeries, (P.), B., 476.

coal washing, (P.), B., 698.

Robinson, C. See Kolthoff, I. M.

Robinson, C. S., use of quinhydrone electrode for determination of p_u of faeces, A., 424.

factors influencing sedimentation, B., 8.

Robinson, C. S., and Huffman, C. F., chemical composition of beef blood. I. Concentrations of certain constituents in normal beef plasma. II. Composition of blood of cows and calves after calving, A., 421.

Robinson, C. S. See also Huffman, C. F.

Robinson, E. A. See Medvedev, S. S.

Robinson, E. B. See Burkhardt, G. N.

Robinson, F. C., rapid determination of small quantities of palladium, B., 516.

Robinson, G. H. See Meader, P. D.

Robinson, (Mrs.) G. M., and Robinson, R., higher aliphatic compounds. II. Hydration of stearic acid, A., 1024.

Robinson, H., X-rays; internal absorption and "spark" lines, A., 875.

Robinson, H. See also Payman, W.

Robinson, H. W. See Austin, J. H., Butler, T. H., Cullen, G. E., and Stadie, W. C.

Robinson, J. See Gilman, H.

Robinson, (Miss) L. I. See Cooper, E. A.

Robinson, M. E. See Onslow, (Mrs.) M. W.

Robinson, P. B., method for measuring porosity [of ceramic materials, etc.], B., 158.

use of silica refractories, B., 158.

Robinson, P. H. See Kenyon, J.

Robinson, P. L., and Smith, H. C., comparison of the atomic weight of silicon from different sources, A., 771.

absolute density and coefficient of expansion of silicon tetrachloride, A., 999.

Robinson, P. L., Smith, H. C., and Briscoe, H. V. A., hydrolytic action of low-pressure superheated steam on salts of the alkaline-earth metals, A., 587.

Robinson, P. L. See also Briscoe, H. V. A.

Robinson, R., influence of general electron displacement on the reactivity of conjugated systems in the molecules of carbon compounds, A., 1244.

Robinson, R., and Shinoda, J., synthetical experiments in the phenanthrene group of alkaloids, I., A., 1048.

Robinson, R., and Smith, John Charles, relative directive powers of groups of the forms RO and R'N in aromatic substitution. III. Nitration of some *p*-alkyl-oxanilic acids, A., 397.

Robinson, R., and Venkataraman, K., synthesis of acacetin and other flavone derivatives, A., 1149.

Robinson, R., and West, H., derivatives of 1-benzyltetrahydroisoquinoline, A., 1045.

Robinson, R. See also Allan, J., Baker, W., Bradley, William, British Dyestuffs Corp., Ltd., Cahn, R. S., Duin, C. F. van, Gatewood, E. S., Gornall, F. H., Graesser-Thomas, F. R., Gulland, J. M., Hean, T., Ing, H. R., Lampe, W., Lea, T. R., Martland, M., Nolan, T. J., Oxford, A. E., Perkin, W. H., jun., Robertson, A., and Robinson, (Mrs.) G. M.

Robinson, R. H., spreaders for spray materials and the relation of surface tension of solutions to their spreading qualities, B., 30.

Robison, C. S., and Mulkey Salt Co., producing chemically pure sodium chloride from natural brine, (P.), B., 1013.

Robison, R., possible significance of hexosephosphoric esters in ossification, A., 638.

Robison, R. See also Eichholtz, F.

Robl, R., analytical quartz lamp; luminescence analysis, A., 701.

umbelliferone as fluorescent indicator, A., 1115.

Roblyer, J. H. See Renshaw, R. R.

Roboz, P. See Karczag, L.

Rocard, Y., diffusion of light in liquids, A., 456.

Roch, J. See Steinkopf, W.

Roche, J., formation of methæmoglobin; action of hydroxylamine on haemoglobin, A., 750.

compounds of the prosthetic group of haemoglobin with oxygen and carbon monoxide; oxygen content of haematin, A., 854.

Roche, J. See also Kauffmann-Costa, O., and Niclouz, M.

Rockstroh, J. See Klein, W.

Rockwell, G., determination of globulin increase in cerebro-spinal fluid, A., 970.

Rockwell, G. J., separating hydrocarbons from oil-bearing earths, (P.), B., 863.

Rockwood, B., new Benedict method for determination of blood-sugar, A., 984.

Rode, O. See Fricke, R.

Rodebush, W. H., activity coefficients of electrolytes calculated from freezing-point data, A., 474.

Rodebush, W. H., and Dixon, A. L., vapour pressures of metals; new experimental method, A., 117.

Rodebush, W. H., and United States Industrial Alcohol Co., process of obtaining alcohols, etc., (P.), B., 603.

Rodebush, W. H. See also Flock, E. F., and Kunz, J.

Rodel, W. See Goldstein, H.

Rodenhauser, W. See Siemens & Halske A.-G.

Rodgers, R. L., carbonising coal, (P.), B., 812.

Rodionov, V. M., importance of alkyl esters of aromatic sulphonic acids for the alkylation of organic compounds, A., 532.

Rodionov, V. M., Matveev, V. K., and "Aniltrust" preparation of diazophenol-sulphonic acids and their nuclear substituted derivatives, (P.), B., 867.

Rodionov, V. M. See also Matveev, V. K.

Rodman, C. J., and Westinghouse Electric & Manufacturing Co., deoxygenation of enclosed atmosphere [in transformers], (P.), B., 65.

Rodman, H., and Rodman Chemical Co., making activated carbon, (P.), B., 779.

Rodman Chemical Co. See Rodman, H.

Roe, J. H., Irish, O. J., and Boyd, J. I., molybdate oxide colorimetric method for determination of phosphorus in blood, A., 763.

Roe, J. H., and Kahn, B. S., colorimetric determination of calcium in blood, A., 763.

Röhl, C. See Moucka, V.

Röhm, O., manufacture of tanning substances, (P.), B., 206.

Röhm, O., production of artificial inorganic-organic tanning materials, and tanning process, (P.), B., 799.

Röhr, K. See I. G. Farbenind. A.-G.

Roelen, O. See Tropsch, H.

Roell, E. See Sieverts, A.

Römer, R. See Scheibe, G.

Römer, W. See Markiewicz, M.

Rörig, W. See Birckenbach, L.

Rössiger, M. See Valentiner, S.

Rössler, vegetation and field experiments on soils showing "exchange" acidity, B., 207.

Rössler, G. See Scheibe, G.

Rössler & Hasslacher Chemical Co. See Brown, M. J., Cambron, A., Krause, E., Paulson, P. M., Trusler, R. B., and Williams, C. S.

Rössner, H., Ruine, E., and Grasselli Dyestuff Corporation, basic chromic salts and process of making them, (P.), B., 788.

Roest, J., catalysis of oxidations by adrenaline, A., 1179.

Roest, R., influence [on dyeing] of the degree of dispersion of dyes in dye liquors, B., 335.

Röthler, H. See György, P.

Roger, M. L. C., preparation of ethyl-*sec*-butylbarbituric acid, (P.), B., 890.

Roger, R. See McKenzie, A.

Rogers, A., analytical data on the oils from sharks and rays, B., 19. suggested tests on shoe upper leather, B., 69.

Rogers, A., and Mathur, B. N., oil tanning, (P.), B., 891.

Rogers, A. F., crystallography of 2 : 1 sodium sulphate-carbonate, A., 661. mathematical study of crystal symmetry, A., 1194.

Rogers, C. F., comparison of the official method of ashing plant tissues and products with the Hertwig and Bailey method, B., 1026.

Rogers, C. W., interaction between copper and sulphuric acid, A., 587.

Rogers, D. G., Daniels, L. C., and National Aniline & Chemical Co., production of vat [dibenzanthrone] dyestuff, (P.), B., 576.

Rogers, E. See Morton, R. A.

Rogers, F. M., Paulus, M. G., and Standard Oil Co., manufacture of gasoline, (P.), B., 1001.

Rogers, F. M. See also Standard Oil Co.

Rogers, J. F., and Wellman-Seaver-Morgan Co., gas producer, (P.), B., 232*, 351.

Rogers, K. A. See Lapp, C. J.

Rogers, T. H., Grimm, P. V., and Lemmon, N. E., adsorption studies on decolorization of mineral oils, B., 269.

Rogers, T. H. See also Glover, R. E., jun.

Rogers, W., jun., and Taylor, H. S., rate of oxidation of linseed oil, B., 986.

Rogers, W. P., manufacture of hydrogen, (P.), B., 487, 584.

Roginski, S., and Schulz, E., catalytic decomposition of potassium chlorate by dust particles of manganese dioxide, A., 916.

Rogozinski, F., microchemical determination of nitrates, A., 813.

Rohm & Haas Co. See Broeck, J., and Hollander, C. S.

Rohmann, H., and Elektrische Gasreinigungs-Ges.m.b.H., electrical purification of gases by means of alternating current, (P.), B., 408.

Rohmann, H. See also Elektrische Gasreinigungs-Ges.m.b.H.

Rohn, W. See Siemens-Schuckertwerke.

Röiger, W., fastness to rubbing and washing of Naphthol AS dyes, B., 872.

Roiter, V. See Pisarshevski, L. V.

Rojahn, C. A., isomeric relationships in the pyrazole series, A., 624.

Rojahn, C. A., and Kühlung, H. E., Rosenmund's aldehyde synthesis applied to heterocyclic compounds; 1-methylpyrazole-3-, -4-, and -5-alkylides, A., 846.

Rojahn, C. A., and Lemme, G., hydroxy- and ethoxy-mercaptans and their condensation products, A., 143.

Rojahn, C. A., and Rühl, F., constitution of a methylcyclopentenolone [1-methyl-*Δ*-cyclopenten-2-ol-3-one] found in crude pyrroliglucic acid, A., 616.

Rojahn, C. A., and Schulton, J., applicability of lithium in place of sodium for organic syntheses, A., 506.

Rosenmund's aldehyde synthesis applied to [heterocyclic] nitrogen and sulphur compounds, A., 812.

Rojahn, C. A., and Trellov, H., heterocyclic aldehydes. III. Triazolealdehydes, A., 78.

Röka, K. See Holzverkohlungs-Ind. A.-G.

Roland, R., and Rurstein, L., printing kinematograph films, (P.), B., 109.

Rolf, I. P. See Levene, P. A.

Rolfe, R. T., bearing metals, B., 832.

Roll, (Mme.) C. See Gounder, A., and Korschnn, G.

Roll, E. von. See Küster, W.

Roll, L., and Fernandes, L., [X-ray spectrum of] element 61 [illinium], A., 1083.

Rolla, L., and Picardi, G., chemical statics of electronic phenomena, A., 3. ionisation potentials of certain elements of the rare-earth group, A., 760.

Roller, F., phosphorus partition in human blood and changes in different individuals, A., 1187.

Roller, P. E. See Areunson, S. B.

Rollot, A. P., colorimetric determination of nickel, A., 930.

Rollot, A. P. See also Hackspill, L.

Rollot, A., [with Haider, O., and Merka, A.], anthraquinone series. I. Anthraquinonolamides of substituted anthraquinonecarboxylic acids, A., 408.

Rom, P. See Zechmeister, L.

Romanh, A., manufacture of celluloid-like masses from the esters or ethers of cellulose, (P.), B., 580.

Romaine, J. D. See McCool, M. M.

Romhacher Hüttenwerke, and Bronn, J. I., continuous sintering and melting of highly refractory metal oxides, orcs, etc., (P.), B., 134.

Romeo, G., and Giuffré, U., nepeta, pennyroyal, and origanum oils, B., 107.

Romoli-Venturi, D. See Binaghi, R.

Rona, P., and Deutsch, W., cholesterol and lecithin suspensions, A., 792.

Rona, P., and Gyotoku, K., poisoning of lipase by quinine and atoxyl, A., 432.

Rona, P., and Iwasaki, K., glycolysis. VI. Distribution of phosphorus in the blood, A., 1051.

Rona, P., and Kleinmann, H., nephelometric investigation of enzymic proteolysis. V., A., 643.

connection between degree of dispersion of substrate and enzyme action; determination of enzymic lipolysis, A., 977.

Rona, P., and Krebs, H. A., isohaemagglutination. I. Significance of electrolytes in isohaemagglutination, A., 537.

Rona, P., and Lasnitza, A., action of urethanes on serum lipase, A., 202.

lipase of tissues, A., 866.

Rona, P., and Melli, G., distribution of ions in blood-serum. III., A., 315.

Rona, P., Mislowitzer, E., and Seidenberg, S., autolysis. V., A., 93.

Rona, P., and Nicolai, H. W., enzymic metabolism of bacteria. I. Respiration and glycolysis in the case of *B. coli*. II. Aerobic glycolysis and the splitting of some other sugars by *B. coli*; micro-determination of invertase, A., 868.

Rona, P., and Sperling, M., blood-sugar. X. Distribution of dextrose in plasma and corpuscles, A., 1166.

Rondon, P., participation of pyrroles in the synthesis of melanin, A., 538.

Ronzoni, E. See Bishop, G. H.

Rooksby, H. P. See Smithells, C. J.

Rooney, T. E., and Clark, L. M., determination of phosphorus in steels containing tungsten, B., 493, 883.

Roos, C., increased conductivity of solid dielectrics on exposure to X-rays, A., 456.

Roos & Co., B., manufacture of sodium sulphide, (P.), B., 128.

conversion of sodium sulphide and similar substances into a granular form, (P.), B., 583.

Root, F. B. See Jones, L. W.

Roper, A. J. See Brady, O. L.

Roper, E. C., and Pridgeaux, E. B. R., analysis of commercial bifluorides, B., 582.

Roper, E. C. See also Pridgeaux, E. B. R.

Roper, E., resinous condensation products from phenols and formaldehyde, (P.), B., 955.

Rosa, J. T., ripening of tomatoes, A., 1063.

Rosbaud, I., [with Mark, H.], X-ray examination of aluminium silicates [and pseudobrookite], A., 889.

Roschier, H., loading and sizing of paper, B., 704.

Roscoo, M. H. See Chick, H.

Rose, D. C., scattering of α -particles through small angles, A., 889.

Rose, H. See Eppler, W. F.

Rose, H. J., system $\text{Na}_2\text{SO}_4\text{-Na}_2\text{Cl}_4\text{-MgSO}_4\text{-MgCl}_2\text{-H}_2\text{O}$, A., 26. coko macrostructure, B., 181*.

Rose, J. See Seal Co. (London), Ltd.

Rose, J. R., and Harris, J., gaseous fuel production, (P.), B., 351.

Rose, M. S., and MacLeod, G., maintenance values for the proteins of milk, meal, bread and milk, and soya-bean curd, A., 428.

Rose, R. P. See Hopkinson, E.

Rose, W. C., and Cox, G. J., alleged interchangeability of arginine and histidine in metabolism, A., 764.

Rose, W. C., and Huddleston, B. T., availability of taurine as a supplementing agent in diets deficient in cystine, A., 1056.

Rose, W. C. See also Corley, R. C., and Cox, G. J.

Rosecrans, C. Z. See Bradley, M. J.

Rosedale, J. L. See Plummer, R. H. A.

Rosemary Creamery Co. See Dunham, H. V.

Rosen, R. See Kraus, C. A.

Rosenbaum, B. See Löwenbein, A.

Rosenberg, H., use of asbestos [micro-asbestos] in the paint industry, B., 955.

Rosenblatt, M., and March, A. J., action of manganese on alcoholic fermentation, A., 641.

Rosenblom, J., effect of radium on metabolism, A., 199.

Rosenblum, S., singly-charged α -rays, A., 772. retardation of α -particles by matter, A., 879.

Rosenbohm, A. See Bierich, R.

Rosenbohm, E. See Lifschitz, I.

Rosenberg, J. E., and Stegeman, G., adsorption of ions by metallic mercury, A., 1201.

Rosenbnsch, R. See Riedel, J. D., A.-G.

Rosencrants, F. H., and International Combustion, Ltd., apparatus for drying granular material, (P.), B., 305*.

Rosencrants, F. H. See also Vickers & International Combustion Engineering, Ltd.

Rosendahl, F. See Reindel, F.

Rosendahl, R., determination of copper, arsenic, and mercury, B., 293.

Rosenfeld, A. See Kohn, M.

Rosenfeld, H., influence of cerebrospinal fluid on the precipitation by electrolytes of positively and negatively charged sols at a definite pH ; differentiation of fluids rich in albumin and globulin, A., 424.

Rosenfeld, L. See Neuberg, C., and Sabety, S.

Rosenblain, W., Batson, R. G., and Tucker, N. P., effect of mass in the heat treatment of nickel steel, B., 492.

Rosenhain, W., and Murphy, A. J., micro-structure of mercury, A., 996.

Rosenhauer, E., [with Hoffmann, H., and Unger, H.], crystalline methylene bases of the quinoline series. I., A., 735.

Rosenhauer, E., [with Schmidt, A., and Unger, H.], constitution of pinacyanols, A., 1260.

Rosenhauer, E., and Feilner, A., constitution of the dye from 2-methyl-substituted indoleone salts and phenylhydrazine, A., 1257.

Rosenheim, A., Frommer, S., Gläser, H., and Händler, W., complex metal phosphites and pyrophosphates, A., 696.

Rosenheim, A., and Händler, W., structure of ammines of bivalent platinum, A., 958.

Rosenheim, A. See also Chem. Fabr. Schleich G.m.b.H.

Rosenheim, O., and Webster, J. A., antirachitic properties of irradiated sterols, A., 870.

colour tests suggested for vitamin-A, A., 1181.

Rosenheim, O. See also Dudley, H. W.

Rosenmund, K. W., and Boehm, T., polyhydroxybenzyl alcohols; 3 : 4 : 5-tri-hydroxybenzyl alcohol and a taurin derived therefrom, A., 1136.

Rosenqvist, T. See Hägglund, E.

Rosenstein, L., removing traces of chlorine from air, (P.), B., 539.

Rosenstein, L. See also Henderson, C. T., and Koppers Co.

Rosenthal, A. See Freudlich, H.

Rosenthal, B., and Lipschitz, W., action of quinine and its derivatives on metabolism and heat regulation, A., 1057.

Rosenthal, F., and Wischick, L., determination of bile-acids in blood, A., 1184.

Rosenthal, H., and Pintsch, J., Akt.-Ges., distillation of solid bituminous fuels, (P.), B., 701*.

Rosenthal, S. M., liberation of adsorbed substances from proteins. II. Effect of addition to blood of sodium oleate on non-protein nitrogen, A., 1165.

combining power of proteins with rose-Bengal, A., 1271.

Rosenthal, S. M., and Ackman, F. D., combining power of proteins with rose-Bengal. II. Application as a quantitative test to the cerebrospinal fluid, A., 1271.

Rosenthal, W. See Tammann, G.

Rosenthal, *W. G.* See Friedländer, *K.*
 Rosenthaler, *L.*, microchemical analysis. IV. Anthraquinone- β -sulphonic acid as a reagent for alkaloids, *A.*, 186.
 action of emulsin on amygdalin, *A.*, 186.
 phytochemistry [1. mannitol in jalap; 2. sucrose in belladonna root; 3. the cyanophoric glucoside in the bark of *Pyrus aucuparia*, Gaertn.; 4. a cyanophoric glucoside in *Achillea millefolium*, L.; 5. hydrocyanic acid in *Chloris petraea*], *A.*, 210.
 determination of dextrose, particularly in urine, *A.*, 327.
 microchemical reactions of tunicaine, *A.*, 531.
 iodometric determination of arsenic acid, *A.*, 702.
 behaviour of heavy metal sulphides towards heavy metal salts in the presence of alcohol, *A.*, 811.
 Rosenwald, *L.*, increased urinary lactic acid in avitaminosis and the influence of insulin on this increased output, *A.*, 436.
 Rosenzweig, *S.*, preparation of carboxylic esters of halogenated polyhydroxy alcohols, (*P.*), *B.*, 964.
 Rosenzweig, *S.* See also Kopler, *L.*
 Roser, *E.*, revoluble kilns for distilling bituminous materials, (*P.*), *B.*, 972.
 Rosney, *W. C. V.* See Morton, *R. A.*
 Ross, *C. S.*, and Shannon, *E. V.*, composition and optical properties of beidellite, *A.*, 143.
 minerals of bentonite and related clays and their physical properties, *B.*, 361.
 Ross, *E. C.* See Stadie, *W. C.*
 Ross, *G.*, roasting sulphur-containing ores, (*P.*), *B.*, 754.
 Ross, *H. C.*, Morris, *H. C.*, and Walker, *W.*, & Sons, Ltd., removing hair from hides or skins, (*P.*), *B.*, 23.
 Ross, *J. B.* See Ross, *J. M.*
 Ross, *J.* See Farmer, *E. H.*
 Ross, *J. D. M.* See Normand, *A. R.*
 Ross, *J. F.* See Campbell, *E. D.*, and Crabtree, *J. T.*
 Ross, *J. M.*, Ross, *M. J.*, and Ross, *T. B.*, method of moth-proofing, (*P.*), *B.*, 913.
 Ross, *M. J.* See Ross, *J. M.*
 Ross, *P. A.*, influence of the scattering substance on the intensity of the Compton line in scattered X-rays, *A.*, 1072.
 X-rays scattered by molybdenum, *A.*, 1186.
 ratio of intensity of the Compton lines, *A.*, 1187.
 Ross, *P. A.* See also Webster, *D. L.*
 Ross, *W. H.*, and Jones, *R. M.*, specific gravity of concentrated solutions of phosphoric acid, *A.*, 21*.
 Ross, *W. H.*, Jones, *R. M.*, and Mehring, *A. L.*, simultaneous production of potassium phosphate and phosphoric acid, (*P.*), *B.*, 946.
 Rossem, *A. ran.*, and Meyden, *H. ran der.*, physical properties of rubber. I. Influence of high temperature on the stress-strain curve of vulcanised rubber, *B.*, 502, 555*.
 Rossi, *G.*, and Basini, *A.*, adsorption by animal charcoal, *A.*, 1091.
 Beer's law and Congo-red solutions, *A.*, 1097.
 Rossi, *G.*, and Bocchi, *C.*, decomposition of potassium ferrocyanide by light, *A.*, 253.
 Rossi, *G.*, and Cechetti, *B.*, protection of suspensoid colloidal solutions, *A.*, 243.
 a mercuri-organic compound of phenyl- β -naphthylamine, *A.*, 312.
 colouring matters derived from thiocarbodibenzidine. II., *A.*, 513.
 Rossi, *L.*, detection of borates in the presence of borates, *B.*, 404.
 Rossiter, *E. C.* See British Cyanides Co., Ltd.
 Rossner, *E.* See Abderhalden, *E.*
 Rossner, *O. ran.*, copper-f-magnesium-cadmium] alloys, (*P.*), *B.*, 635.
 Rostock, *P.*, stability of pepsin solutions; sterile enzyme preparations, *A.*, 1275.
 Roszak, *A.*, heat exchangers, (*P.*), *B.*, 145*.
 Roth, *E.*, disintegrating apparatus, (*P.*), *B.*, 471.
 Roth, *E. B.*, retort for treating oil shales, (*P.*), *B.*, 1005.
 Roth, *H.*, volumetric determination of hyposulphite, *B.*, 582.
 Roth, *H.* See also Durst, *G.*, and Magnus, *A.*
 Roth, *K.* See Merck, *E.*
 Roth, *L. E.* See Bodnář, *J.*
 Roth, *P.* See Farbw. vorm. Meister, Lucius, & Brüning.
 Roth, *W. A.*, correction of thermochemical data, *A.*, 477.
 Roth, *W. A.*, Naeser, *G.*, and Döpke, *O.*, density of carbonado and lustre carbon, *A.*, 894.
 Roth, *W. A.*, and Schwartz, *O.*, physico-chemical properties of solutions of germanium dioxide [and arsenic trioxide], *A.*, 350.
 Rothe, *F.*, and Brenek, *H.*, transforming barium and strontium sulphates into other barium and strontium compounds, (*P.*), *B.*, 787.
 Rothe, *H.*, work of escape of electrons from oxide cathodes, *A.*, 653, 980.
 Rothen, *A.* See Briner, *E.*
 Rothenbach, *W.*, distillation columns, (*P.*), *B.*, 858.
 Rothen, *F.*, emission of electrons from cold metals, *A.*, 1188.
 Rothmann, *A.* See Boehringer & Soehne, *C. F.*
 Rothmund, *V.*, vapour pressure and base exchange in zeolites and permutites, *A.*, 908.
 Rothrock, *H. A.* See Dutcher, *R. A.*
 Rothstein, *E.*, and Thorpe, *J. F.*, formation and stability of spiro-compounds. XIII. spiro-Compounds from substituted levulic acids, *A.*, 1038.
 Rothstein, *K.* See Fricke, *H.*
 Rott, *C.*, zinc distillation in vertical retorts fired with lignite producer gas, *B.*, 134.
 Rottlinger, *A. C.*, determination of the total solids [of a fermented liquid or carbohydrate solution]; a new micro-method, *B.*, 210.
 Roucka, *E.*, [regular supply of air to] furnaces, (*P.*), *B.*, 521*.
 Ronghton, *F. J. W.* See Hartridge, *H.*
 Ronhier, *A.* See Perrot, *E.*
 Ronkhefman, *N.* See Lvov, *A.*
 Ronnqvist, *F. L.* See Husted, *L. J.*
 Ronnqvist, *C.*, and Jedrzejowski, *H.*, action of radiations from radioactive substances on leaf excrescences, *A.*, 647.
 Rourke, *R. K.* See Benson, *H. K.*
 Rouse, *G. F.* See Giddings, *G. W.*
 Rousseau, *R. F.*, fixation of solar or ultra-violet energy for producing catalytic phenomena from solar or ultra-violet rays, (*P.*), *B.*, 406.
 Rousseau, *M.*, olive oil production in Tunis, *B.*, 953.
 Rousseau, *R.*, analysis of waxes; new chemical constant, *B.*, 135.
 Routala, *O.*, and Sevón, *J.*, chemical changes in sulphite-cellulose boiling, *B.*, 626.
 influence of curtailed time of heating upon the constitution of sulphite pulp, *B.*, 704.
 digestion of spruce wood with dilute nitric acid, *B.*, 818.

Roux, *C. A. A. M.*, carbonisation, distillation, and gasification of fuels, (*P.*), *B.*, 521.
 Rouyer, *E.*, ebullioscopic determination of double salts in solution, *A.*, 923.
 Rouyer, *E.* See also Bourion, *F.*
 Rowe, *A. W.* See Phelps, *E. P.*
 Rowe, *F. M.*, some synthetic organic colouring matters used in lake making, *B.*, 449.
 "blinding" of viscose dyed with insoluble azo-colours, *B.*, 741.
 Rowe, *F. M.*, Burr, *A. H.*, and Corbissley, *S. G.*, constitution of Iliana Yellow G [M.I.B.] and other yellow pigment colours, *B.*, 310.
 Rowe, *F. M.*, and Levin, *E.*, composition of some products used for the production of insoluble azo-colours, *B.*, 6, 310.
 Rowe, *F. M.*, Levin, *E.*, Burns, *A. C.*, Davies, *J. S. H.*, and Tepper, *W.*, reaction of certain diazosulphonates derived from β -naphthol-1-sulphonic acid. I. Preparation of phthalazine, phthalazone, and phthalimidine derivatives from 4'-nitrobenzene-2-naphthol-1-diazosulphonate, *A.*, 625, 1047.
 Rowe, *F. M.* See also Parrish, *E.*
 Rowe, *H.*, adsorption of gases by activated charcoal at very low pressures. I. At air temperature, *A.*, 345.
 adsorption of carbon dioxide by activated coconut charcoal, *A.*, 572.
 adsorption of gases by activated charcoal at very low pressures. If. At -183° , *A.*, 673.
 Rowe, *J. W.*, elimination of mercurials, *A.*, 976.
 Rowell, *S. W.*, and Russell, *A. S.*, oxidation of ethyl ether to oxalic acid in presence of uranyl nitrate, *A.*, 145.
 Rowell, *S. W.* See also Russell, *A. S.*
 Rowland, *J. M.* See Wells, *J. M.*
 Roy, *G. J.*, and Société Chimique des Usines du Rhône, manufacture of acetic anhydride and aldehyde, (*P.*), *B.*, 406*.
 Roy, *S. C.*, law and mechanism of unimolecular reaction, *A.*, 483, 585*. total photo-electric emission of electrons from metals as a function of the temperature of the exciting radiation, *A.*, 1073.
 Royal Aircraft Establishment, mechanical tests of adhesives for timber, *B.*, 557.
 examination of glued joints by X-rays, *B.*, 557.
 Royce, *H. D.*, and Kahlenberg, *L.*, electrode potential and replacing power of manganese, *A.*, 1104.
 Royer, *L.*, non-parallel growth of one crystal on another, *A.*, 339.
 Royle, *F. A.* See Harrison, *H. A.*
 Royster, *P. H.* See Joseph, *T. L.*
 Rozanov, *S.*, decomposition of raw phosphate with peat, *B.*, 1023.
 Rozenberg, *M. A.*, hydrogen ions as a factor lowering the order of a reaction, *A.*, 911.
 Ruark, *A. E.*, fine structure and Zecchin effect of complex mercury lines, *A.*, 652.
 Ruark, *A. E.*, Möhler, *F. L.*, and Chenault, *R. L.*, fine structures in non-hydrogenic atoms, *A.*, 1069.
 Ruark, *A. E.* See also Foote, *P. D.*
 Rubber Service Laboratories Co., insecticides, (*P.*), *B.*, 934*.
 Rubber Service Laboratories Co. See also Hand, *C. N.*, and Scott, *W.*
 Ruben, *S.*, gas and vapour indicating device, (*P.*), *B.*, 39.
 combining gases and vapours with liquids, [hydrogenation of oils], (*P.*), *B.*, 553*.
 Rubenstein, *L.*, substitution in vicinal trisubstituted benzene derivatives. IV., *A.*, 518.
 Rubenstein, *L.* See also Perkin, *W. H., jun.*
 Rubentschik, *L.*, urease formation by bacteria in the absence of urea, *A.*, 1178.
 Ruby, *C. E.*, and Kawai, *J.*, densities, equivalent conductivities, and relative viscosities at 25° of solutions of hydrochloric acid, potassium chloride, and sodium chloride, and of their binary and ternary mixtures of constant chloride-ion content, *A.*, 686.
 Rucht, *R.* See Dimroth, *O.*
 Ruck, *F.* See Dimroth, *O.*
 Rudberg, *E.*, peculiar effect in the bombardment of platinum with slow electrons, *A.*, 105.
 Rudberg, *K.* See Euler, *H. von.*
 Rude, *J.*, production of water-gas from solid fuel, (*P.*), *B.*, 84.
 producing oil-gas in externally heated retorts, (*P.*), *B.*, 39.
 producing coke, gas, and tar from solid fuel, (*P.*), *B.*, 119.
 carbonisation of fuel by vertical retorts and the like, (*P.*), *B.*, 429.
 preheating of fuel preliminary to carbonisation, (*P.*), *B.*, 699.
 Rudenko, *V.* See Tarassov, *R.*
 Rudigier, *E. A.*, and Standard Development Co., preparation of fuel oil, (*P.*), *B.*, 862.
 Rudislis, *W. A.*, and Engelder, *C. J.*, catalytic activation of titania, *A.*, 250.
 Rudnick, *P.* See Watson, *W. W.*
 Rudolfs, *W.*, Heukelkamp, *H.*, and Zeller, *P. J. d.*, relation between ripe sewage sludge and incoming fresh solids, *B.*, 725.
 Rudolph, *E. A.* See Ruzicka, *L.*
 Rudolph, *G.*, [dyeing] cellulose acetate silk effects [in union fabrics], *B.*, 484.
 Rudolph, *G.* See also Farbenfabr. vorm. *F. Bayer & Co.*, and I. G. Farbenind. A.-G.
 Rue, *J. D.*, and Mousson, *W.*, production of straw-board pulp, *B.*, 400.
 fifty years' progress in the pulp industry, *B.*, 818*.
 Rue, *J. D.*, Wells, *S. D.*, Rawling, *F. G.*, and Stadl, *J. A.*, semi-chemical pulp ing process, *B.*, 945.
 Rue, *E.*, mixing concrete, mortar, chemical products, and the like, (*P.*), *B.*, 729*.
 Rühl, *E.* See Rojahn, *C. A.*
 Rühlemann, *F.*, determination of the strength of cellulose fibres, *B.*, 187.
 Rülke, *K.*, and Ciołofski, *F.*, preparation of di- and poly-piperidyls, (*P.*), *B.*, 464.
 Ruer, *R.*, supersaturated mixed crystals and the nature of martensite, *A.*, 786.
 thermal effects of the iron-carbon eutectoid, *B.*, 748.
 Ruer, *R.*, and Bode, *K.*, copper oxide and the atomic weight of copper, *A.*, 1075.
 Ruer, *R.*, and Kuschmann, *J.*, miscibility of copper and of tin with iron in the molten state, *A.*, 786.
 reduction of weights of powders in air to weights in a vacuum, *A.*, 1089.
 Rüschberg, *F.*, and Rhenania Verein Chemische Fabriken Akt.-Ges., obtaining alkali thiosulphate from solutions containing alkali sulphide, (*P.*), *B.*, 538.
 Rüschberg, *F.* See also Rhenania Verein Chemische Fabriken Akt.-Ges.
 Rüter, *E.*, and Bornstein, *A.*, effect of alkaloids and salts on vital staining, *A.*, 316.
 Rüter, *E.* See also Bornstein, *A.*
 Rüter, *R.* See Hirsch, *P.*
 Rütgerswerke Akt.-Ges., and Teichmann, *H.*, lubricating greases, (*P.*), *B.*, 431.

Rütsche, G., removal of deposit, scale, or incrustations from metal, (P.), B., 1018.

Ruff, O., active carbon. VI. Theory of adsorption by carbon, A., 316.

 active charcoals and their adsorptive power, B., 115.

 manufacture of plastic material out of non-plastic oxides, (P.), B., 709*.

Ruff, O., and Busch, W., potential of fluorine from measurements of the decomposition voltages of fused fluorides, A., 129.

Ruff, O., and Hirsch, B., fractional precipitation. II. Topochemical influence, and the separation of manganese and zinc with sodium sulphide, A., 126.

 fractional precipitation. III. Induced precipitation; apparent contradictions to theoretical requirements; Feigl's hypothesis of the formation of sulphides, A., 345.

Ruff, O., and Josephy, B., investigations at high temperatures. XVIII. Pure calcium carbide and its heat of formation, A., 635.

Ruff, O., Rimmott, E., and Zeumer, H., active charcoal. IV. Binding of chlorine and bromine by wood charcoal and their removal by ammonia and water vapour, A., 19.

Ruff, O., and Thomas, Fritz, behaviour of niobium and tantalum pentoxides towards carbon tetrachloride, and the determination of niobium and tantalum, A., 1222.

Ruff, W. See Küster, W.

Ruff, J., detection of coconut oil in cacao butter and chocolate, B., 552.

 application of Gerber's process to the determination of fat in cocoa and chocolate, B., 765.

Rugeley, E. W., and Johnson, T. B., ethyl- γ -diethoxyacetooacetate as a reagent for the synthesis of glyoxalines, A., 147.

Rugeley, E. W. See also Bindschedler, E.

Ruggles, G. W. See Young, L.

Ruggi, P., and Pestalozzi, S. M., cotton: affinity of derivatives of dehydrothiophenol and primuline, B., 436.

Ruggi, P., and Reiner, M., acetylene derivatives. V. Phenyl- β -naphthyl-acetylene, A., 301.

Ruhemann, S. See Epple, P., and Herzenberg, J.

Ruhmann, J., elimination of sulphur from spathic iron ore by roasting, B., 825.

Ruiz, C., barytes from the Gloria mine (Racalmuto), A., 695.

Rule, H. C., and Numbers, (Miss) A. H., optical activity and the polarity of substituent groups. IV. sec.- β -Octyl esters of *o*-, *m*-, and *p*-methoxy- and nitrobenzoic acids, A., 1038.

Rule, H. C., and Smith, J., optical activity and the polarity of substituent groups. III. Menthyl acetophenone-*o*-carboxylate, A., 457.

Rule, J. F. J. See Partington, J. R.

Rule, W., variation of the *L.M.F.* of a photo-active cell, containing a fluorescent electrolyte, when the amount of fluorescent material in solution varied, A., 361.

Rumford Chemical Works. See Fiske, A. H., and Wilson, E. L.

Rumm, H. See Tausz, J.

Rumpf, E., distribution of photo-electric sensitivity and the red limit, A., 768.

Rundshagen, H., determination of nicotine in tobacco, B., 214.

Runge, F. See Tammann, G.

Runge, W. See Tammann, Combustion Engineering Corporation.

Runius, S. See Holmberg, B.

Runne, E. See Rössner, H.

Ruoss, H., determination of the size and number of pores of porous filtering plates, B., 223.

Rupe, H., manufacture of hydrocyclic ω -aminoalkyl compounds, (P.), B., 27.

 preparation of secondary bases of the naphthalene series [dinaphthomethyl-amines], (P.), B., 185.

Rupe, H., and Fehlmann, F., derivatives of campholcarbinol [1 : 2 : 2 : 3-tetramethylcyclopentyl-1-carbinol], A., 398.

Rupe, H., and Gubler, A. W., methylene derivatives of menthone, A., 841.

Rupe, H., and Kambl, E., unsaturated aldehydes from acetylenic alcohols, A., 821.

Rupe, H., and Kersten, L., 5- and 4-nitroisatin, A., 843.

Rupe, H., and Metzger, A., catalytic reduction of some cyano-compounds of naphthalene, A., 65.

Rupe, H., Metzger, A., and Vogler, H., reduction of some aliphatic cyano-compounds; reduction of cyanoacetylcarbamide, A., 55.

Rupe, H., and Perret, J., optically active esters of 1 : 2 : 2 : 3-tetramethylcyclopentyl hydroxymethyl ketone and 1 : 2 : 2 : 3-tetramethylcyclopentyl β -hydroxyethyl ketone, A., 406.

Rupe, H., and Schaefer, M., esters of camphylcarbinol, A., 72.

Rupe, H., and Vogler, H., reduction of aromatic nitro-cyano-compounds, A., 63.

Rupert, A. See Haller, R.

Rupert, O. See Jander, G.

Rupp, D. H., water purification at East Liverpool, Ohio, B., 312.

 new water purification plant at Toronto, Ohio, B., 342.

Rupp, E., magnetic properties of phosphors, A., 114.

 interference of canal-rays, A., 450.

 light-period of atoms of alkali metals with and without a magnetic field, A., 875.

 acidimetric determination of both components in "hydargyrum oxycyanatum," B., 384.

Rupp, E., and Brachmann, W., determination of the bromine value of fats, B., 499.

Rupp, E., and Gersch, H., constitution of the cyanomercurisalicylic acids and of "hydargyrum salicylicum," A., 534.

Rupp, E., and Jockwig, B., simple and odourless method for the preparation of chlorine water, A., 926.

Rupp, E., and Mais, P., simple acidimetric determination of mercuric chloride, A., 140.

Rupp, E., and Müller, K., mercury compounds of "medinal" and the official (Ph. G. V., Ergänzung IV) test for identifying "medinal," A., 852.

Rupp, E., Müller, K., and Mais, P., acidimetric and thiocyanometric determination of mercuric chloride [in sublimate pastillic], B., 849.

Rupp, E., and Schlee, H., formation of formaldehyde by reduction of carbonic acid by hydrogen peroxide, A., 1025.

Ruppel, W., and American Electro-Osmosis Corporation, method of killing micro-organisms, (P.), B., 170*.

Ruppel, W., Wolf, A., and American Electro-Osmosis Corporation, electro-osmotic purification of glue and gelatin, (P.), B., 456.

Ruppert, F. von. See Kircher, A.

Rusch, M., determination of effective cross-section towards slow electrons, A., 939.

Ruschmann, G., and Barendamm, W., retting of flax with *Plectridium pectinorum* (*Bac. amylobacter*, A. M. et Bredemann) and *Bacillus felsineus*, Carbone, B., 8.

Rushbrooke, J. E. See Garner, W. E.

Rushton, E. R., and Daniels, F., vapour pressure of arsenic trioxide, A., 342.

Rushton, W., and Aubin, P. A., biology of Jersey water works, B., 468.

Rusk, R. L., absorption of hydrogen in potassium vapour arcs, A., 249.

Ruska, J., observations by Arabian alchemists and doctors on mercury poisoning, A., 815.

Russell, A. S., passivity, catalytic action, and other phenomena, A., 133.

 air oxidation of titanous sulphate solution; vanadous sulphate, a new and powerful reducing agent, A., 592.

 volumetric determination of uranium, vanadium, copper, and iron in uranium ores, B., 328.

Russell, A. S., Evans, D. C., and Rowell, S. W., order of removal of manganese, chromium, iron, cobalt, and nickel from amalgams, A., 911.

Russell, A. S., and Rowell, S. W., positions of tungsten and molybdenum in the normal potential series, A., 911.

Russell, A. S. See also Rowell, S. W.

Russell, H. N. See Saunders, F. A.

Russell, M., filtration or decolorisation of sugar and other liquors, (P.), B., 642.

Russell, M., production of alkali polysulphides containing sulphur in a colloidal form, (P.), B., 126.

Russell, R. See also Latex Developments, Ltd.

Russell Engineering Co. See Weber, H. W.

Russig, F. See Oberschlesische Kokswerke & Chem. Fabr. A.-G.

Rustless Iron Corporation of America. See Wild, R.

Ruth, G., Akt.-Ges., and Weithner, R., priming composition [for varnishes and lacquers containing drying oils], (P.), B., 67.

Rutherford, (Sir) E., and Wooster, W. A., natural X-ray spectrum of radium-B, A., 6.

Ruthsatz, J., Ingerö, E., Schrenk, H., and Aktiebolaget Vaporackumulator, plant where heat-consuming apparatus operates with a number of feed conduits; utilising heat accumulators in connexion with cellulose digesters, (P.), B., 269.

Ruthsatz. See Brauer, K.

Rutovskii, B., Vinogradova, I., and Kolotov, G., essential oils of Sochi district [Caucasus], B., 340.

Rutovskii, B., Vinogradova, I., and Kondratski, A., essential oils of the Crimea, B., 340.

Rutovskii, B., Vinogradova, I., and Koslov, W., essential oils from Sukhum district [Caucasus], B., 340.

Ruzicka, L., carbon rings. I. Constitution of civetone (zibetone), A., 614.

 carbon rings. VII. Constitution of muscone, A., 1143.

Ruzicka, L., and Brugger, W., carbon rings. III. Preparation of cyclooctanone from azelaic acid, A., 615.

 carbon rings. IV. Preparation of cyclononanone from sebamic acid. V. Preparation of a 9-membered ring from an 8-membered ring, A., 726.

Ruzicka, L., Brugger, W., Pfeiffer, M., Schinz, H., and Stoll, M., carbon rings. VI. Relative ease of formation, relative stability, and spatial structure of saturated carbon rings, A., 727.

Ruzicka, L., and Liebe, K., constitution of tercsantalic acid, A., 400.

Ruzicka, L., and Pfeiffer, M., higher terpene compounds. XXVIII. Elemol, A., 1148.

Ruzicka, L., and Rudolph, E. A., higher terpene compounds, XXVII. Azulene, A., 299.

Ruzicka, L., Stoll, M., and Schinz, H., carbon rings. II. Cyclic ketones containing from ten to eighteen carbon atoms in the ring, A., 615.

Ryan, H., Flood, D., and McNultz, P., action of the oxides and oxy-acids of nitrogen on β -diphenylmethane oxide, A., 620.

Ryan, H., and Glynn, M., relative speeds of removal of nitric acid from systems containing certain aromatic compounds, A., 606.

Ryan, H., and Markey, A., action of nitric acid and of nitrogen peroxide on triphenylamine, A., 606.

Ryan, W. P., rate of travel of fusion zones in coke ovens, B., 474.

Rychlik, M. See Dziewoński, K.

Rychter, A. See Hrynakowski, C.

Rybom, M. See Euler, H. von.

Rydin, H., effect of ether and chloroform on the action of acetylcholine and pilocarpine on the intestine, A., 320.

 effect of chloral hydrate and chloral-formamide on the intestinal action of parasympathetic stimulants, A., 320.

 effect of trichloroisopropyl alcohol and trichloroisobutyl alcohol on the intestinal action of parasympathetic stimulants, A., 320.

Ryley, C. F. See British Celanese, Ltd.

Ryner, A., furnaces, (P.), B., 1000*.

Rys, Eichmann, L., & Co., bleaching of sulphite-cellulose, B., 871.

Ryschkewitsch, E., and Merck, F., melting point of graphite, A., 232.

Ryskalschuk, A. See Kostytschey, S.

Rysseberghe, M. van, 1 : 2-dimethylcyclopentane compounds, A., 1238.

Rytel, Z. See Jablczynski, K.

Rywosch, S., swelling processes in hygroscopic movements, A., 326.

S.

S.I.P. Soc. Ital. Potassa, production of potash and alumina from leucite, (P.), B., 487.

Sabalitschka, T., determination of the melting point of cacao butter, B., 20.

 preservation of foods, beverages, feeding-stuffs, etc., (P.), B., 333.

Sabalitschka, T., and Böhml, E., preservation of [pharmaceutical] syrups, B., 511.

Sabalitschka, T., and Bolt, W., substance, from the putrefying stomach of a dog, resembling atropine in Vitali's test, A., 91.

Sabalitschka, T., Dietrich, K. R., and Böhml, E., effect of esterifying carbocyclic acids on their action in preventing the development of micro-organisms, A., 1059.

Sabalitschka, T., and Erdmann, W., adsorption from solution and the valuation of adsorbents used in therapy, B., 418.

Sabalitschka, T., and Harnisch, C., detection of minute quantities of formaldehyde, A., 853.

Sabalitschka, T., and Jungermann, C., absolute and percentual alkaloid content of various parts of *Lupinus luteus*, L., during growth, A., 99.

 effect of light on the alkaloid content of *Lupinus luteus*, L., A., 203.

 influence of formaldehyde on the alkaloid synthesis of *Lupinus luteus*, L., A., 440.

Sabatitscha, T., and Jungermann, C., absolute and percentage alkaloid content of single parts of the seedling and young plant in *Strychnos nux vomica*, I., during germination, A., 440.

Sabatitscha, T., and Weidling, H., influence of acetaldehyde on the carbohydrate content of plants, A., 645.

■ nutrition of plants with aldehydes. VI. Polymerisation of formaldehyde by *Elodea canadensis* to higher carbohydrates, A., 871.

■ nutrition of plants with aldehydes. VII. Increase of the carbohydrate content of *Elodea canadensis* by acetaldehyde, A., 1182.

Sabatier, P., and Durand, J. F., attempted catalytic hydrogenation of ethylene oxide, A., 497.

Sabatay, S., syntheses of calcium glucophosphate and glycerophosphate, A., 1123.

Sabatay, S., and Rosenfeld, L., glucosephosphoric acid, A., 152.

Sabatay, S. See also Neuberg, C.

Sabry, M. M., proteins of lymph and suprarenal glands, A., 1167.

Saccardi, P., melanogen, A., 106.

colour reaction of the skin relating to the genesis of melanins, A., 636.

sensitive reaction for olive oil extracted with carbon disulphide, B., 677.

Sachanen. See Sachanov.

Sachanov, A., Grosny petroleum, B., 474.

Sachanov, A., and Bestushev, M., nature of the protoparaffin waxes in petroleum, B., 523.

Sacher, J. F., determination of iron in red lead [for glass manufacture], B., 631.

Sachs, G., aluminium and aluminium alloys, B., 751.

Sachs, G., [with Dressler, W., and Smirzitz, R.], fission of azimethines by means of mercuric chloride, A., 392.

Sachs, G., and Balassa, L., mercaptomercuric bases and a mercury derivative of bromoform, A., 596.

Sachs, G., and Ott, M., mercuration of aromatic sulphides, A., 396.

Sachse, H. See Le Blanc, M.

Sack, H., dielectric constants of solutions of electrolytes, A., 456.

Sackett, G. E., haemoglobin and iron in blood, A., 1165.

Sacks, J., and Adams, R., synthesis of homochaulmoic acid, homohydrocarpic acid, and chaulmoiglyramines, A., 1137.

Sadlikov, J., biochemical problems in leather manufacture, B., 891.

Saechnit, W., bleaching and refining curd soap, (P.), B., 887.

Sanger, R., electric moment of the benzene molecule, A., 456.

Saerens, E., theory of electrolytes, A., 1206.

Safftien, K. See Fries, K.

Sager, D. D. See Huston, R. C.

Sagstetter, K. See Dimroth, O.

Saha, M., nitrogen in the sun, A., 221.

explanation of the spectra of metals of the second group, A., 1186.

Saha, M., and Sur, R., absolute value of entropy, A., 234.

influence of radiation on ionisation equilibrium, A., 774.

Sahash, Y., constitution of the dihydroxyquinolinocarboxylic acid from the hydrolysis of rice husks. II., A., 441.

constitution of the β -acid derived by hydrolysis of crude oryzanin, A., 846.

Sahsrabandhi, D. L., composition of the food grains, vegetables, and fruits of Western India, B., 933.

Sahsrabuddhe, D. L., and Daji, J. A., nitrogen recuperation in the soils of the Bombay Deccan. I., B., 249.

Sahorka, A. See Skrabal, A.

Sailard, E., catalysis [precipitation of lime] in the sugar industry, B., 103.

[determination of sucrose in molasses], B., 103.

St.-Clair Deville, J., research on low-temperature carbonisation at the Sarre mines, B., 347.

St. John, J. L. See Olson, G. A.

Saito, H., thermo-balanced analysis of chemical changes in metals, oxides, and sulphides at high temperatures, A., 1101.

Sak, S., and Fleischmann Co., production of yeast, (P.), B., 140*.

Sakkalarios, E., and Jatrides, D., ready method for the preparation of α -nitro-aniline in the laboratory, A., 39.

Sakhatwalla, B. D., manufacture of alloy steels and iron, (P.), B., 96.

alloy [chrome] steel, (P.), B., 884.

refining silicon-containing iron-chromium alloy, (P.), B., 884.

low-carbon iron-chromium alloys, (P.), B., 884.

ferrous alloy, (P.), B., 1018*.

Sakom, D. See Akt.-Ges. für Chem. Prod. vorm. H. Scheidemandel.

Sakurada, I. See Kita, G.

Sakurada, Y., carbothionic acids and esters, A., 950.

Sakurai, K., reconversion of methaemoglobin into oxyhaemoglobin. II. Perfusion experiments. III. Experiments on the living animal, A., 85.

Sakurai, S. See Suzuki, T.

Salabarria, J. See Aebel, E.

Salamon, M. S. See Marshall, S. C.

Salam, E. O., infra-red absorption of the N—H linking, A., 453.

heat capacity of non-polar solid compounds, A., 683.

heat capacity of solid aliphatic crystals. II., A., 784.

Salant, W., and Nadler, J. E., cardiac reactions to drugs and the c_H of the blood. I. Caffeine, A., 1273.

Salan, H., and Bader & Salau, production of air-gas mixtures for combustion, (P.), B., 42*.

Salcines, L., centrifugal machines, (P.), B., 392.

Sale, J. W. See Baader, C. H., and Wilson, J. B.

Salerni, E. M., removing dust from gases or vapours, (P.), B., 304.

distillation of carbonaceous materials, (P.), B., 308.

Salerno, P. M., thermostats, (P.), B., 1000*.

abrading materials in the form of slabs, wheels, discs, etc., (P.), B., 1015.

hardening of steel, (P.), B., 1018.

Salkind, J., swelling of caoutchouc and the constitution of the solvent, A., 576.

Salkind, J., and Kruglow, A., action of hydrogen bromide on a glycol of the acetylenic series, A., 1121.

Sals, C. M. See McKee, R. M.

Salmon, E. S. See Goodwin, W.

Salmon, W. D., and Miller, E. R., water-soluble vitamin content of the velvet bean, A., 437.

Salmon-Legagnen, F., mixed ketones derived from the α -mononitrile of camphorico acid, A., 613.

action of magnesium ethyl bromide on the methyl ester of camphoric acid α -mononitrile, A., 951.

Salomon, H. See Karrer, P.

Salt, H., leather dyeing. I. and III., B., 153, 781.

Salt, H., and Astrom, A., leather dyeing. IV., B., 781.

Salt, H. See also McCandlish, D.

Salt Production Syndicate, Ltd., extraction of salts from aqueous solutions, (P.), B., 875.

Salzbergwerk Neustadt, preparation of brine free from gypsum, (P.), B., 322.

Salzer, F. See Ziegler, K.

Salzmann, R. See Pictet, A.

Salzwerk Heilbronn Akt.-Ges., Lichtenberger, T., and Flor, K., manufacture of pure hydrochloric acid, (P.), B., 155.

Sambue, E., and Brazzola, L., burner for heavy oil, (P.), B., 1006*.

Samec, J., and Klemen, R., plant colloids. XVI. Behaviour of starch components towards iodine, and their protective colloid action, A., 22.

Sameshima, J., theory of atomosily, A., 118.

density and compressibility of acetylene, A., 569.

rate of flow of various gases through a porous wall, A., 895.

binary mixtures, A., 908.

Sameshima, J., and Suzuki, T., action of protective colloids on mercuric iodide, A., 735.

Samislov, A., fate of invertase in the normal and immune organism, A., 202.

Samoilov, Y. V., and Terentjeva, K. F., mineral composition of the skeletons of some invertebrates from Barents and Kara seas, A., 1052.

Sampson, M. M., Macallum's test for calcium, A., 763.

Samsøen, M., crystallisation of glycerol, A., 568.

change in the coefficient of dilatation of substances in the amorphous state, A., 570.

expansion of industrial glasses, B., 585.

dilectric and thermal study of soda-silica glasses, B., 709.

Samsøen, M., and Mondain-Monval, P., anomalous specific heats of vitreous substances; boric anhydride and glycerol, A., 567.

Samson, K., determination of phosphoric acid in small amounts of material, A., 328.

volumetric micro-determination of phosphoric acid [in serum], A., 763.

Samson, K. See also Releke, R.

Samter, W., and Schröter, K., chemical method of reducing the diameter of tungsten wire [filaments], B., 65.

Samuel, A., new electrical insulator, B., 198.

Samuel, A. See also Job, A.

Samuel, F. B., fractionating tower, (P.), B., 256.

Samuel, R., and Markowicz, E., constitution of the atoms scandium to nickel, A., 881.

Samuel, W. See Meisenheimer, J.

San Jose Spray Manufacturing Co. See Bunds, L. A.

Sánchez, J. A., micro-method for the determination of mol. wts. from vapour density, A., 666.

colour reaction for cyclic primary amines, A., 720.

Sandberg, A., recuperative heat exchange apparatus for air or other media, (P.), B., 901*.

Sandberg, E. See Nilsson, R.

Sandberg, E. S., and Nilsson, H. A. E., preparation of alcohol from sulphite-cellulose waste liquor, (P.), B., 894.

Sandberg, M. See Brand, E.

Sandborn, L. T., and Marvel, C. S., structure of the compounds produced by the addition of mercuric salts to olefins, A., 747.

Sandeman, I., secondary spectrum of hydrogen at higher pressures. II., A., 213.

Sander, A., purifying gases obtained from coal or other fuels, (P.), B., 183.

carbonisation plant at the Leopold Collieries, Edderitz, B., 969.

Sander, F. See Badische Anilin- & Soda-Fabrik, and Chem. Fabr. Griesheim-Elektron.

Sander, W., and Melssner, K. L., influence of the compound $MgZn_2$ on the ageing of aluminium alloys, B., 752.

Sanders, J. F., extracting arsenides from ores, (P.), B., 548.

Sandilands, J., determination of mercuric iodides, B., 405.

Sando, C. E., inositol from the blackberry (*Rubus argutus*, Link) and flowering dogwood (*Cornus florida*), A., 982.

quercimeritin from *Heisanthus annuus*, A., 982.

Sando, C. E. See also Hann, R. M.

Sandonini, C., reactions in the presence of charcoal, A., 252.

beats of mixing of water with acetic acid and isopropyl alcohol, A., 1008.

Sandonini, C., and Gerosa, G., separation of mixed liquids by the action of salts, A., 236.

Sindor, G. See Gerngross, O.

Sandoz Chemical Co., Ltd., and Woodhead, A. E., dyeing of "immunised" cotton materials, (P.), B., 270.

Sands, L. See Anderson, E.

Sandstedt, R. M. See Blish, M. J.

Sandved, K. See Collenberg, O.

Sandvik, O., and Spence, B. J., infra-red spectrum of the calcium arc in a vacuum, A., 329.

Sandvik, O. See also Jones, L. A.

Sanford Riley Stoker Co. See Riley, R. S.

Sanfourche, A., cementation of iron by silicon chloride, B., 1017.

Sanger, R., temperature-sensitivity of the dielectric constant for methane, methyl chloride, methylene dichloride, chloroform, and carbon tetrachloride vapours, A., 993.

Sanner, E. O., dyeing cellulose silks, viscose silks, (P.), B., 785.

Sannie, C., mechanism of the synthesis of α -amino-acids by means of Strecker's reaction. I. Kinetic study of the disappearance of hydrocyanic acid, A., 276.

mechanism of the synthesis of α -amino-acids by means of Strecker's reaction. II. Disappearance of ammonia and the intermediate reactions. III., A., 504.

Sano, K., solubility of amino-acids at various hydrogen-ion concentrations, A., 345.

solubility of glycine in aqueous and aqueous-alcoholic solutions at different p_H , A., 672.

Sano, S., application of thermodynamical principles to the time rates of chemical changes and vaporisation, A., 909.

Sano, T., enzymes contained in taka-diastase preparation, A., 865.

Sanquineti, A. See Cerlotti, A.

Sansome, F. W., dry matter of swedes. I., B., 296.

Santesson, C. G. See Niklasson, H.

Sanzenbacher, R., measurements of the charge on evaporating particles, A., 1191.

Sargent, D. F., Legat, A. A., and Wittleton, G. R., electrical treatment of air [for combustion of oil fuels, etc.], (P.), B., 1004.

Sarkar, P. B., compounds of gadolinium, A., 1218.

complex compounds of chromium with amino-acids, A., 1235.

Sarkar, P. V. See Paul, B. K.
 Sarre, K. See Mallison, H.
 Sarria, J. G. See Tautel, K.
 Sartory, A., Sartory, R., and Meyer, J., action of radium on *Aspergillus fumigatus*, Fresenius, grown in media with and without iousable salts, A., 869.
 Sartory, R. See Sartory, A.
 Sarubina, O. V. See Domontovitsch, M. K.
 Sasagawa, K. See Cournot, J.
 Sasaki, K. See Uchida, S.
 Sasaki, T. See Brand, K.
 Saslavsky, J., change of volume in the formation of bases and acids, A., 661.
 Sass. See Benrath, A.
 Sass, (Miss) R. R. See Lowry, T. M.
 Satō, D., fergusonite and allanite from Iyo, Japan, A., 934.
 Satō, M., kinetic theory of the viscosity of liquids, A., 234.
 Satō, M., and Tseng, K. F., preparation of fuel oil by the distillation of the lime soap of soya-bean oil. III. Experiments using oxides and carbonates of alkaline-earth metals as saponifying agent, B., 731.
 Satō, S., dilatometric investigation of the A3 and A4 transformations in pure iron, A., 669; B., 324.
 Sattelberg, O., electric conductors [copper cores covered with ferromagnetic metals applied by spraying], (P.), B., 19*.
 Satterly, J., latent heat of vaporisation and its relation to curvature and pressure, A., 785.
 velocity of sound in a liquid and its relation to the latent heat of vaporisation, A., 785.
 Sauer, E., and Diem, W., influence of some lyophilic colloids on the velocity of chemical reactions, A., 914.
 Sauer, J. N. A., manufacturing decolorising carbon, (P.), B., 41*.
 activated carbon for medicinal purposes, (P.), B., 119.
 manufacture and use of active carbons, (P.), B., 308.
 Saner, J. N. A. See also Naamloze Vennootschap Algemeene Norit Maatschappij.
 Sauerbier, J. C. M., preparation of the catalyst for Heslinga's determination of the elements, A., 582.
 Sauerwald, A., analysis of precious metal double solder-filled wire, etc., B., 159.
 Sauermann, R. See Weiss, R.
 Sauerwald, F., density measurements at high temperature. VII. Densities of molten lead-cadmium, cadmium-tin, and zinc-tin alloys, and of molten cadmium, A., 786.
 Sauerwald, F., and Drath, G., surface tension of molten metals and alloys. I. Method of maximum bubble pressure and the surface tension of mercury and bismuth, A., 790.
 Sauerwald, F., and Neuendorff, G., electrolytic production of heavy metals from fused electrolytes, B., 131.
 Sauerwald, F., and Wecker, J., density measurements at high temperatures. VI. Change in volume of pig-iron on melting, B., 131.
 Sauerwald, F., and Widawski, E., density measurements at high temperatures. VIII. Density and expansion of white and grey pig iron in the liquid and solid states, A., 999.
 Saunders, F. A., spectrum of argon, A., 1070.
 Saunders, F. A., and Russell, H. N., spectrum of ionised calcium (Ca II), A., 102.
 Saunders, F. A. See Lyman, T.
 Saunders, K. H. See British Dyestuffs Corporation, Ltd.
 Saunders, S. W. See also Garner, W. E.
 Sauvageau, C., bromine-containing gland cells (bromogynes) in *Antithamnion*, Naeg, A., 210.
 Sauveur, A., and Krivobok, V. N., dendritic segregation in iron-carbon alloys, B., 131*.
 Sauveur, A., and Lee, D. C., influence of strain and of heat on the hardness of iron and steel, B., 131*.
 Savard, J. See Grignard, V.
 Saville, T., cause and correction of red water troubles, B., 724.
 Sawai, K. See Gadamer, J.
 Saway, K. See Bruchhausen, F. von.
 Sawink, I. See Skrabal, A.
 Sawyer, F. See Amborg, S.
 Sawyer, R. A., metastable P term in the manganese arc spectrum, A., 214.
 Sawyer, R. A., and Beese, N. C., pp'-group in the arc spectrum of zinc, A., 103.
 Sawyer, R. A., and Martin, E. J., vacuum spark spectrum of carbon, 2200-6000 Å., A., 1070.
 Sawyer, R. A., and Paton, R. F., new members in the series spectrum of trebly-ionised silicon, A., 1.
 Saz, E., artificial ageing of amber, (P.), B., 597.
 Saz, P., and Kriwatschek, E., germicidal suspensions of silver and mercury salts, (P.), B., 772.
 Saxon, R., sulphuric acid from a quadruple mixture, A., 34.
 production of sulphuric acid by electrolysis, A., 134.
 electrolytic deposition of nickel, A., 135.
 electrolysis of lead chloride, A., 251.
 water and metals under the influence of electrolysis, A., 365.
 new notation, A., 493.
 electrolytic water: [anodic oxidation of chromic oxide], A., 583.
 electrolysis of lead and tin ores, B., 17.
 copper from its sulphide ores, B., 94.
 Sayce, L. A., and Briscoe, H. V. A., critical temperature of mercury, A., 568.
 dielectric constants of some liquids and liquid mixtures, A., 1193.
 Sayers, R. R., Smith, N. A. C., Fieldner, A. C., Mitchell, C. W., Jones, G. W., Yant, W. P., Stark, D. D., Katz, S. H., Bloomfield, J. J., and Jacobs, W. A., toxic gases from Mexican and other high-sulphur petroleums and products, B., 36.
 Sayers, R. R., and Yant, W. P., pyrotannic acid method for determination of carbon monoxide in blood and in air, A., 100.
 Sazavsky, V., surface tension of sugar factory juices, B., 927.
 Skarsky, B., perhydridase of milk, A., 202.
 Skarsky, B., and Michlin, D., purification of oxydoreductase (Schardinger enzyme, perhydrolase), A., 977.
 Sborgi, U., electronic theory of the anodic behaviour of metals, in particular those showing passivity. III. Influence of anions, A., 1212.
 Sborgi, U., and Lenzi, D., electrolytic preparation of sodium perborate, B., 985.
 Scagliarini, G., analogy in behaviour and isomorphism between cerium and thorium, A., 1196.
 Scagliarini, G., and Brasi, E., additive compounds of tin and titanium halides with organic bases, A., 310.
 Scagliarini, G., and Monti, M., additive compounds of tin and titanium halides with organic bases, II., A., 1113.
 Scalfi, W. B., and Sons Co. See Newman, M. F.
 Scanlin, J. R. See Van Gundy, M. C.
 Scarborough, H. A., and Waters, W. A., chlorination and bromination of 4-amino-diphenyl, A., 512.
 Scarf, F. See Wood, C. E.
 Scarritt, E. W. See Partridge, E. M.
 Scatchard, G., E.M.F. measurements in aqueous solutions of hydrochloric acid containing sucrose, A., 911.
 Milner and Debye theories of strong electrolytes, A., 1006.
 unimolecularity of the inversion process, A., 1107.
 Schaeff, F. See Bloch, B.
 Schaal, E., production of resinous bodies, (P.), B., 137.
 production of hard resinous bodies, (P.), B., 502*.
 Schaap, A. K., heat treatment of grey iron castings, (P.), B., 164*.
 Schaarschmidt, A., and Lewyff, H., sulphurisation and oxidation products of methylantranquinone, B., 625.
 Schabalin, K. N. See Makovecki, A. E.
 Schachemeyer, R. See Holda, D.
 Schacht, W., production of cellulose with the aid of chlorine, B., 45.
 Schade, C. See Orndorf, W. R.
 Schädel, P. See Society of Chemical Industry in Basle.
 Schäfer, B. See Chem. Fabr. Grisheim-Elektro.
 Schaefer, C., heterochromatic photometry, B., 167.
 so-called black and white content of pigments in the Ostwald colour-system, B., 638.
 Schaefer, C., and Bormuth, C., coloured photographs of line spectra, A., 2.
 Schaefer, C., and Philipp, B., moment of inertia of carbon monoxide, A., 556.
 absorption spectrum of carbon dioxide and the structure of the carbon dioxide molecule, A., 558.
 Schäfer, H. H. See Tschirch, A.
 Schaefer, J. See Collin & Co.
 Schäfer, L. See Hahn, A.
 Schaefer, R., determination of the actual reaction of the capillary blood by means of the quinhydrone electrode, A., 422.
 Schaefer, R. See also Tröger, J.
 Schäfer, W. See Helferich, B., Henning, N., and Mislowitzer, E.
 Schaeffer, G. See Kahn, M.
 Schäfer, W. See Wöhrel, L.
 Schäffner, A. See Waldschmidt-Leitz, E.
 Schaefer, M. See Rupert, H.
 Schäfer, L. See Hahn, A.
 Schaffer, R. J. See Lambert, B.
 Schaffrath, O. See Farbw. vorm. Meister, Lucius, & Brüning.
 Schairer, J. F., and Lawson, C. C., pickeringite from Portland, Connecticut, A., 194.
 Schaller, P. See Fraenkel, W.
 Schalnikov, A. See Semenov, N.
 Schames, L., deduction of equation of state from specific heat, A., 234.
 Schantz, C., wood preservation, B., 158.
 Schapiro, E. See Pringsheim, H.
 Schapiro, N., apparatus for determination of water in oils, etc., B., 971.
 Schaposchnikov, K., mechanics of light-quanta, A., 451.
 Schaposchnikov, K. See also Batschinski, A.
 Scharf, E. See Badische Anilin- & Soda-Fabrik.
 Scharf, G. E., and Nobel's Explosives Co., prevention of rancidity in vegetable oils used in plastic compositions for coating fabric, paper, etc., (P.), B., 887.
 Scharrer, K. See Kürschner, K., Niklas, H., and Strobel, A.
 Schandt, G., hydrogen-ion concentration of human faeces, A., 317.
 Schauer, T., quartz sand and massive quartz, two different mineralogical modifications, B., 877.
 Schauf, K., and Barth, W., interferometry. III. Observation of the course of a chemical reaction by means of the Zeiss-Löwe liquid interferometer, A., 914.
 Schau, K., and Kellner, H. M., photometric and spectrophotometric studies. V. Tube photometer for ultra-violet spectrophotometry, A., 493.
 Schau, K., and Kraemer, W., simple spectral apparatus of high light intensity. I. Spectral photography of weak luminescence phenomena, A., 1020.
 Schau, K. See also Feick, R.
 Schay, G., relations between fat constants, B., 593.
 Schay, G. See also Schwicker, A.
 Sehee, H. See Rupp, E.
 Scheermesser, W., manufacture of yoghurt bacteria in tablet form, B., 508.
 decomposition of barium saccharate, (P.), B., 561.
 Scheff, C., oxidation of oxalic acid with potassium permanganate, A., 48.
 crystalline pigment obtained from normal human urine by means of *p*-dimethylaminobenzaldehyde, I., A., 858.
 Scheffer, F. See Blank, E.
 Scheffer, F. E. C., and Brandsma, W. F., reaction velocities, A., 913.
 Scheffer, F. E. C., and Voogd, M., vapour pressure of bromine, A., 342.
 Scheffer, F. E. C. See also Hoeflaak, (Miss) J. M. A.
 Scheibe, G. [with Römer, R., and Rössler, G.], mutability of absorption spectra in solutions in relationship to the distribution of charge of the molecules and connexion between absorption and refraction, III., A., 774.
 Scheibe, G., and Fischer, W., quinoline-red and related dyes of the diquinolylmethane series, A., 627.
 Scheibe, J., natural and artificial resins, B., 501.
 Scheible, H., compounds of bivalent carbon. I. Carbon monoxide diethylacetal [diethoxyethylene], its preparation from ethyl diethoxyacetate or ethyl formate, A., 711.
 Scheible, H., and Neef, H., synthesis of *N*-alkylideneamino-acids and their transformation by hydrogenation into *N*-alkylamino-acids, A., 942.
 Scheible, H., and Rettig, F., compounds of thiophen. II., A., 843.
 constituents of bituminous tar oils rich in sulphur [teichthyl oils]. IV., B., 624.
 Scheid'sche Affinerie, G. A., silver-copper alloys of high silver content, (P.), B., 549.
 Scheifele, R. See Trantz, M.
 Schellenberg, A. See Tropsch, H.
 Scheller. See Chem. Fabr. Johannisthal.
 Scheller, A., lubricating oil, (P.), B., 972.
 Schelling, N. J., growth stimulation of *Aspergillus niger* by a vitamin-B preparation, A., 644.
 Schelling, V. See Grünacher, C.

Schemjakin, F. M. See Dunin, M. S.

Schenck, equilibria between lead, oxygen, and sulphur in the roasting [of lead sulphide], B., 951.

Schenck, M., preparation of *s*-trimethylguanidine, A., 156.

Schenck, M., and Kirchhof, H., ethylguanidino and *NN*-dimethyl-*N'*-ethylguanidine, A., 717.

N,N'-trimethyl-*N*-thiocarbamido; formation of methylated guanidines, A., 717.

ethylenediguanidine, A., 525.

guanidine derivatives, A., 1129.

Schenck, R., chemical equilibrium between lead sulphide and its oxidation products, B., 589.

equilibrium relations between iron, oxygen, and carbon, B., 633.

Schenck, R., and Thorsell, T., reduction of iron oxide ores and residues with reducing gases, (P.), B., 329.

Schenderovitch, F. See Krassovsky, K.

Schenkita, P., preventing and dissolving scale in steam boilers, (P.), B., 145*.

Schenkel, M. See Siemens-Schuckertwerke Ges.m.b.H.

Schepa, R. See Schwalbe, C. G., and Wieland, H.

Schepa, W. See Duisberg, W.

Scherbaum, J. B. C., pulverising or grinding mills, (P.), B., 124, 615, 695.

Scherer, P. C. See Chambers, R. F.

Schering, K., determination of sucrose in condensed milk, B., 26.

Schermerhorn, T. R. See Hoyt, S. L.

Schercshewer, J. M. See Brodsky, A. E.

Schertel, L. See Goldschmidt, T., A.-G.

Schesler, A. A. See Tschitschibabin, A. E.

Shestakov, P., manufacture of sulphonic acids and salts thereof from mineral oils, (P.), B., 864.

Shestakov, P., and Merejkovski, B. K., photographic developer, (P.), B., 560, 805*.

Schotelig, P. See Society of Chemical Industry in Basle.

Scheuble, R., recovery of vapours from gases, (P.), B., 178.

Scheunert, A., and Frossard, J., methods for obtaining white and multicolour effects on fabrics dyed with sulphur dyestuffs, B., 49.

Scheuer, A. [printing] coloured reserves on coloured grounds both obtained with basic dyes, B., 581.

Schiaparelli, C., and Avenatti-Bassi, C., combining power of various vegetable tanning substances with the protein of hide, B., 716.

Schichirev, J. See Povarnin, G.

Schicht, G., and Eisenstein, A., manufacture of linoleum covering material, (P.), B., 67.

Schicht, G. See also Eisenstein, A.

Schick, E. See Stolle, E.

Schick, F. See Deutsche Erdöl-Akt.-Ges.

Schidlof, A., "degeneration" of gases and the properties of fluids at low temperatures, A., 463.

Schidrowitz, P., vulcanised latex and its commercial applications, B., 204.

particle shape of powders for incorporation in rubber, B., 956.

Schleemann, G. See Biltz, H.

Schlier, P. See Dilthey, W.

Schiffer, E., determination of carbon in pig-iron, steel, and ferro-alloys, B., 492.

Sobikort, G. See Freundlich, H.

Sohiller, K. See Küster, W.

Schilov, E., micro-volumetric apparatus, A., 706.

Schilov, E. See also Budnikov, P.

Schilov, N., and Nekrassov, B., adhesion forces in solution. V. Adsorption of complex compounds, A., 20.

Schilov, N., and Pevsner, (Mits) S., adhesion forces in solutions. VI. Experiments on adsorption in mixed solutions, A., 238.

Schilov, N., and Tschepelevetzki, M., adhesion forces in solutions. VIII. Solubility and adsorption of electrolytes, A., 1200.

Schilt, W. See Fabr. Chem. Prod. F. Hefti.

Schiltz, J. J., and Wilhelmi, D. F., process for impregnating materials [with rubber], (P.), B., 22.

Schimke, A. See Müller, Robert.

Schlammel, H., flameless combustion of vapours and gases by means of catalysts, (P.), B., 396.

Schimmeleischmidt, K. See Fries, K.

Schimpi, G. See Kalb, L.

Schimpritz, R. See Drucker, C.

Schinz, H. See Ruzicka, L.

Schinzinger, A. See Schwarz, R.

Schirmacher, K. See Farb. vorm. Meister, Lueius, & Brüning.

Schirmann, (Frl.) M. A., vacuum technique, A., 1223.

Schirotzauer, H., solutions for intravenous injection, (P.), B., 902.

Schlaack, P., and Kumpf, W., method for determining the constitution of the peptides, A., 833.

Schläpfer, P., and Stadler, O., cuprene tar; pyrogenic condensation of acetylene, A., 389.

Schlaich, H. See Weinland, R.

Schlamp, H., treatment of hydrocarbon oils [crude benzene, etc.], (P.), B., 814.

Schlaip, R., reflexion of X-rays from crystals, A., 663.

Schlaip, W., active principles of the posterior lobe of the pituitary body, A., 546.

Schlaifer, E. See Gränacher, C.

Schlatte, H., explosives, 1876-1926, B., 854*.

Schlecht, L. See Grube, G.

Schleede, A. See Kordatzki, W., and Tiede, E.

Schleicher. See Benrath, A.

Schleicher, A., [with Toussaint, L., and Troquay, P. H.], determination of antimony by electrolysis in hydrochloric acid solution, A., 1020.

Schleicher, A., and Toussaint, L., use of electrodes of V2A-steel in electro-analysis, B., 675.

Schleicher, H. M., and American Metal Co., lead refining, (P.), B., 591.

production of calcium arsenate, (P.), B., 708.

Schleifarth, A. O. See Weber, H. W.

Schleipen, R. See Hahn, F. J.

Schlesinger, M., electrodeless discharge in hydrogen, A., 1189.

Schlesinger, N., displacement of equilibria by substances which simultaneously act as [catalytic] accelerators, A., 1109.

Schlesisches Kohlenforschungs-Inst. der Kaiser-Wilhelm-Ges., purifying commercial benzol [and petroleum oils], (P.), B., 479.

Schlichting, O. See Wieland, H.

Schlickum-Werke A.-G., and Koeh, E., purification of montan wax, (P.), B., 184.

Schliephake, O. See Wöhler, J.

Schlinck, J. See Deutsche Kunsthorn-Ges.m.b.H.

Schlinvitch, S., photo voltaic cells with unalterable electrodes, A., 579.

Schloesing, T., removing nicotine from tobacco, (P.), B., 465, 512.

Schlossmann, H., amino-acids and polypeptides in blood in pregnancy and child-birth, A., 860.

fate of amino-acids injected into the blood, A., 1171.

Schlubach, H. H., isomeric flavorotatory acetylchloroglucose, A., 600.

Schlubach, H. H., and Bomhard, H. von, constitution of *h*-glucose, A., 600.

Schlubach, H. H., and Firgan, H., activity of the fourth hydroxyl group of dextrose, A., 1126.

Schlubach, H. H., and Mergenthaler, F., mono- and di-methoxypieric acids and their chlorides, A., 281.

Schlubach, H. H., and Rauchenberger, W., syntheses of polysaccharides. III. The galactosidoglucose of E. Fischer and E. F. Armstrong, II, A., 1127.

Schlumberger, E., rapid physico-chemical methods for the control of electric furnaces, I., B., 18.

commercial calcium carbide, I., B., 319.

compound having bactericidal and fungicidal properties [from sulphite-cellulose waste lye], (P.), B., 694.

Schlünberger, E., and Koholyl Akt.-Ges., electrolytic decomposition of chlorides, (P.), B., 916*.

Schlumberger, E. See also Hilpert, S., and Königsberger Zellstoff-Fab. & Chem. Werke Koholyl Akt.-Ges.

Schlumpf, J., apparatus for treating vegetable, animal, or artificial fibres with dyes or other liquids, (P.), B., 11*.

Schlutz, F. W., and Ziegler, M. R., spectroscopic observations on cod-liver oil. II. Absorption bands of cholesterol, A., 1065.

Schmalenbach, A., separation of the lowest-boiling constituents of a mixture of liquids by vacuum distillation, (P.), B., 968.

Schmalfuss, H., preparation of a Grignard reagent in a test-tube in the presence of moisture, A., 718.

Schmalfuss, H., and Werner, H., skin skeleton of insects. I., A., 316.

Schmatola, O., preparation of a Peru balsam substitute, (P.), B., 299.

Schmelzer, A. See Muth, F. B. F.

Schmid, A., testing and estimation of decay in preserved eggs, B., 338.

rotary furnaces for burning cement etc., (P.), B., 918.

Schmid, A. See I. G. Farbenind. A.-G.

Schmid, A. See Zinke, A.

Schmid, E., material resembling aluminium, (P.), B., 754.

Schmid, E. See also Georgieff, M.

Schmid, F. See Ambard, L.

Schmid, F. (Milan). See Natta, G.

Schmid, G. See Küster, W.

Schmid, Gerhard, calculation of velocity constants, A., 480.

Schmid, Gerhard. See also Grube, G.

Schmid, H. See Manchot, W.

Schmid, L., and Bangor, B., condensation products of 2-aminopyridine with aliphatic-aromatic ketones. II, A., 848.

Schmid, L., and Becker, B., condensation of 2-aminopyridine with aliphatic aldehydes, A., 845.

condensation of 2-aminopyridine with thiocarbonyl chloride, A., 845.

Schmid, L., and Stahr, R., sterol from *Ulmus campestris*, A., 949.

sterol from *Parthenium argentatum*, A., 949.

Schmid, W. See Berl, E.

Schmidling, W., preparation of lacquers from tung oil, (P.), B., 988.

Schmidinger, R., scope of the analytical quartz-lamp in the paint and varnish industry, B., 760.

Schmid-Kochlin, A. W., [apparatus for] treatment of textile goods with liquids, (P.), B., 706*.

Schmid, A., danger of mercury vapour, A., 815.

influence of water vapour and hydrogen chloride on the velocity of decomposition of ammonia, B., 87.

Schmid, A. (Erlangen). See Rosenhauer, E.

Schmid, Albert, chlorination of sulphite-cellulose waste liquor, (P.), B., 122*.

Schmid, Albert. See also Bodenstein, M.

Schmid, Albrecht. See Farb. vorm. Meister, Lucius, & Brüning.

Schmid, Arvid. See Fischer, W. M.

Schmid, A. A., and Perevosskaja, N. O., chemico-physiological basis of Manolov's reaction, A., 1165.

Schmid, A. A. See also Vladimirov, G. E.

Schmid, C. L. A. See Brakefield, J. L., Foster, G. L., Greenberg, D. M., and McCay, C. M.

Schmid, Erich, Ascherl, A., and Knilling, W. von, bromotrinitromethane (IV) and acetylbenzonitrile (I), A., 817.

similar behaviour of persubstituted halogen compounds and halogenoacyl-amines, A., 1121.

Schmid, Erich, Ascherl, A., and Mayer, L., aliphatic nitro-alcohols, A., 45.

Schmid, Erich, and Vocke, F., polyglycuronic acids, I., A., 939.

Schmid, Erwin, determination of sulphur trioxide in burner gases, A., 581.

Schmid, Erwin, and Gesellschaft für Chemische Produktion obtaining hydrochloric acid free from arsenic, (P.), B., 238*.

Schmid, Erwin. See also Müller-Clemm, H.

Schmid, E. X., Hutton, W. O., and Cutler-Hammer Manufacturing Co., ascertaining the proportion of a constituent in a fluid [determining carbon dioxide in flue-gas], (P.), B., 262.

Schmid, F., production of artificial horn, (P.), B., 456.

manufacture of artificial horn from proteins or albuminous substances, (P.), B., 799.

Schmid, Ferdinand, and Steyer, H., variation of surface tension of pure water with time, A., 670.

Schmid, Fritz, softening of water, (P.), B., 302, 726*.

Schmid, G. C., binary mixtures, A., 787.

ion-rays, A., 877.

Schmid, H., corrosion in petroleum distillation, B., 1002.

Schmid, Hans, and Hoffmann, F., aromatic compounds of arsenic. II. Internal complex salt of benzenediazonium chloride and arsenic chloride and its transformation into p-phenylenearsinic acid, A., 533.

aromatic compounds of antimony. IX. Internal complex salts from benzene-diazonium chloride and antimony chloride, A., 533.

Schmid, Hans. See also Chem. Fabr. von Heyden A.-G.

Schmid, Harry. See Zeitschel, O.

Schmid, Heinz, electrolytic deposition of carbonaceous iron from its complex compounds with organic acids, A., 248.

Schmidt, H. H., photochemical processes with silver halides, B., 646.
nature of optical sensitisation and desensitisation, B., 772.

Schmidt, J. See *Keppeler, G.*

Schmidt, J. M., cellulose from vegetable substances, (P.), B., 315.

Schmidt, K., melting and re-melting of metals and metallic waste, (P.), B., 674.

Schmidt, Karl, influence of gases on the conservation of fodder, B., 382.
acid formation in silage, B., 847.
preservation of young green fodder, II., B., 847.

Schmidt, Kurt. See *Chem. Fabr. auf Aktien* (vorm. E. Schering).

Schmidt, K. F., action of sulphuryl azide on benzene, A., 66.
the imino-residue, A., 59.
making derivatives of hypothetical imines, including amines and their substitution products, (P.), B., 216, 616*.
production of tetrazoles, (P.), E., 932.

Schmidt, K. F., and Knoll & Co., production of tetrazoles, (P.), B., 1007*.

Schmidt, L. See *Mitchell, H. S.*

Schmidt, M., determination of small quantities of selenium in sulphide minerals, B., 195.
recovery of zinc from burnt pyrites after a chloridising roast, (P.), B., 246.

Schmidt, M. See also *Kalle & Co. A.-G.*

Schmidt, O. See I. G. Farbenind. A.-G.

Schmidt, Otto, catalytic hydrogenation of organic substances, A., 134.

Schmidt, Otto. See also *Badische Anilin- & Soda-Fabrik.*

Schmidt, P., origin of the blood changes in lead poisoning, A., 541.

Schmidt, R. See *Eggert, J.*, and *Stoermer, R.*

Schmidt, R. E., Stein, B., and *Grasselli Dyestuff Corporation*, oxazine dyestuff of the anthraquinone series, (P.), B., 817*.

Schmidt, R. E. See also *Farbenfabr. vorm. F. Bayer & Co.*

Schmidt, S., production of diphtheria toxin in Martin's broth, A., 97.

Schmidt, T. See *Simon, A.*

Schmidt, W. See I. G. Farbenind. A.-G.

Schmidt, Wilhelm, distribution of radioactive matter in free air, A., 656.
machine-made table glass, B., 947.

Schmidt, W. J., plochochroic fat fibres on the needles used for spearing insects, A., 1099.

Schmeider, W. See *Lentsch, H.*

Schmitt, R., detection of ethyl phthalate in spirits, B., 459.

Schmitt, R. See also *Chem. Fabr. Griesheim-Elektron.*

Schmitt, W., hydrogen electrode for body-liquids containing carbon dioxide, A., 647.

Schmitt-Krahmer, C. See *Mangold, E.*

Schmitz, E., and Peiser, F., chemical processes in "lipodiarisis" in the lungs, A., 889.

Schmitz, E., and Siwon, P., kidney and amino-acid excretion, A., 88.

Schmitz, W., material for protection [of fabrics, etc.] against moths, (P.), B., 314.

Schmuck, A., ethereal oils of tobacco, A., 547.
resins and aromatic substances of tobacco, A., 547.
attempt to determine the character of the carbohydrate complex of tobacco, A., 547.

Schmutz, F. S. See *Schütz, G. F. A.*

Schneble, K., production of floor coverings, (P.), B., 1016*.

Schnecke, A., refractive index and density of butter fat, B., 962.

Schnevoigt, A., printing cellulose acetate silk, B., 662.

Schneible, J., distillation, (P.), B., 616*.

Schneider, A. See *Clemm, H.*, *Hangleiter, C.*, *Niederbayerische Cellulose-werke A.-G.*, and *Zellstofffabr. Waldhof.*

Schneider, C. See *Badische Anilin- & Soda-Fabrik.*

Schneider, E., thermal conductivity of air and hydrogen, A., 462, 785.

Schneider, E. C., and Clarke, R. W., respiratory changes during an aeroplane flight to high altitudes, A., 633.

Schneider, E. C., Truesdell, D., and Clarke, R. W., influence of carbon dioxide on man during exposure to reduced barometric pressure, A., 1260.

Schneider, H. See *Society of Chemical Industry in Basle.*

Schneider, Hans. See *Bock, J. C.*, and *Gilbert, M.*

Schneider, K. See *Willstätter, R.*

Schneider, K., utilisation of ferruginous limestone [in coke ovens and gas producers], (P.), B., 361.

Schneider, S. See I. G. Farbenind. A.-G.

Schneider & Cie, agglomeration of finely-divided ores by the Dwight and Lloyd method, B., 61.

Schneider, W. See *Eder, R.*

Schnell, B. See *Ziegler, K.*

Schnetter, K., preventing adhesion of scale in boilers, heaters, evaporators, etc., (P.), B., 113.

Schnetter, K., and Antiscale, Ltd., eliminating scale in fluid containers, (P.), B., 473*.

Schnettler, H. G. See *Wilson, R. E.*

Schniderschitz, N. See *Erben, F. X.*

Schnitzler, E. See *Küster, W.*

Schnitzspahn, K. See I. G. Farbenind. A.-G.

Schnorr, C., and Hefti, F., production of acridine derivatives and their solutions, (P.), B., 341.

Schoblik, A., bacteria in earthenware bodies, B., 877.

Schoch, E. P., dehydrated lignite, (P.), B., 350.

Schoeller, W., preparation of ethers of aliphatic or aromatic dialkylaminoethanol esters and their derivatives, (P.), B., 465.

Schoeller, W., and Gehrke, M., effect of organic substances on the glycolysis of yeast, A., 978.

Schoeller, W. See also *Chem. Fabr. auf Aktien* (vorm. E. Schering).

Schoeller, W. R., separation of iridium from iron, A., 931.

Schoeller, W. R. See also *Powell, A. R.*

Schoen, A. L. See *Dundon, M. L.*

Schoen, R. See *Levaditi, C.*

Schön, W. See *Goldschmidt, S.*

Schönberg, A., preparation of diphenylene sulphide, (P.), B., 528.

Schönberg, A., and Krüll, H., organic compounds of sulphur. IV. Action of triethylphosphine and triethylphosphine peroxide on thioketones, A., 953.

Schönborn, H. See *Agte, K.*

Schöner, K., system iron-oxygen, B., 749.

Schöñfeld, R. See *Fodor, A.*

Schöñfeld, N. See *Herrmann, K.*

Schönheimer, R., preparation of peptides, A., 716.
healthy and arteriosclerotic aorta. I. Quantitative proportions of cholesterol and cholesterol esters, A., 1269.

Schönhöfer, F. See *Schulemann, W.*

Schoenmaker, P. See *Smits, A.*

Schoenmehl, C. B., Inc. See *Conrad, M. E.*

Schoenowka, (Mlle) J. See *Dziewonski, K.*

Schoep, A., identity of composition of planchite and shattuckite, A., 143.
buttenbachite, a new mineral, A., 144*.

schwindite: birefringence, chemical composition, and dehydration of the mineral; comparison with dumontite, A., 379.

Schöpf, G., and Wieland, H., leucopterin, the white wing-pigment of the common white butterfly (*Pieris brassicae* and *P. napi*), A., 1168.

Schöpfer, H., and Bensa, F., (perylene) vat dyes, (P.), B., 433.

Schöppach, A. See *Eller, W.*

Schofield, R. K., experimental verification of Gibbs' adsorption equation by observing the adsorption by mercury of its own ions from solution, and its bearing on Nernst's theory of electrode potential, A., 572.

Schofield, R. K., and Rideal, E. K., kinetic theory of surface films, A., 239.

Schofield, T. E. See *Oberle, A.*

Scholes, G. E., calorimeter, (P.), B., 41*.

Schollenberger, C. J. See *Simon, R. H.*

Scholz, V. See *Chem. Werke Hercules G.m.b.H.*

Scholz, W. See *Rhenania Verein Chemische Fabr. A.-G. Marwedel.*

Schonebaum, C. W., treating sugar-containing juices or solutions to decolorise or purify them, or render them suitable for filtration, (P.), B., 337.

Schonovský, K. See *Wasicky, R.*

Schoofs, F., necessity of assuring the absence of nitric acid in Marsh's toxicological test for arsenic, A., 872.
determination of carbon monoxide in the air of workshops, B., 934.

Schoon, M. U., coatings of fusible substances [metals], (P.), B., 331.
coating articles particularly with metals [by the spray process], (P.), B., 833.

Schoor, A. ran. See *Windaus, A.*

Schoor, N., light-filter for polarimetry, A., 142, 264.
rotation of quinine and its salts, A., 627.

Schoot, C., identification reaction for sodium, A., 814.

Schoot, C., crystallisation by inoculation in micro-chemistry, A., 1050.

Schoot, C., determination of reducing sugars volumetrically in the presence of excess sucrose, B., 507, 508*.

Schoo, N., and Beggemann, H., iodometric micro-determination of copper, A., 40.

Schopf, C., and Boettcher, E., *Lobelia* alkaloids. III., A., 744.

Schoring, A. See *Meisenheimer, J.*

Schott, C., preparation and properties of light-dispersing glasses, B., 407.

Schott, O. See *Jenaer Glaswerk Schott & Gen.*

Schotte, H., and Priebe, H., guanidine studies. I. Synthesis of *N*-methyl-*N*-(β -guanidinoethyl)guanidine, (Kutscher's vitalline?), A., 717.

Schottky, H. See *Krupp, F. A.-G.*

Schottky, W., evaporation of electrons, A., 4.

Schon, E. V., manufacture of margarine and edible fats, (P.), B., 297*.

Schou, S. A., absorption of ultra-violet rays by aldehydes, A., 556.

Schou, S. A. See also *Henri, V.*

Schrader, A. See *Häemann, H.*

Schrader, J. E., effect of heat treatment on the contact *P.D.* of nickel and copper, A., 1196.

Schramm, E. See *Scripture, E. W. jun.*

Schramm, W. See *Honcamp, F.*

Schrantz, W. See *Farbenfabr. vorm. F. Bayer & Co.*, and *Kropp, W.*

Schrantz, W., hydrolysing fats, oils, and waxes, (P.), B., 287, 449*.

Schreber. See *Reissmann, E.*

Schreber, K., relation of Arrhenius between osmotic pressure and latent heat of evaporation, A., 579.

dependence of electromotive force of [lead] accumulators upon acid strength, B., 445.

Schreber, A. See *Manchot, W.*

Schreger, A., utilisation of blast-furnace dust, burnt pyrites residues, and other ferruginous waste materials, (P.), B., 196.

utilisation of flue dust, burnt pyrites, or other ferruginous materials, (P.), B., 196.

Schreiber, A. See *Pringsheim, H.*

Schreiber, H., manufacture of sugar, (P.), B., 561.
purification of beet diffusion juice [using proteolytic enzymes], B., 894.

Schreiber, Hans, thiocyanate content of human serum, A., 192.

Schreiber, (Miss) N. E. See *Booth, H. S.*

Schreinemakers, F. A. H., equilibria in systems in which phases are separated by a semipermeable membrane, XI., XII., XIV., and XVI., A., 359, 578, 800, 1102, 1210.

equilibria in systems in which phases are separated by a semi-permeable membrane. XIII. Isotonic curves in ternary systems in which separation into two or three liquids is obtained, A., 578.

Schreiner, E., and Frivald, O. E., freezing-point measurements for very dilute solutions of strong electrolytes in cyclohexanol, A., 1208.

Schreiter, W. optimum temperature for the extrusion of ($\alpha + \beta$) brass, B., 920.

Schrenk, H. See *Ruths, J.*

Schrenk, H. H. See *Kemmerer, G.*

Schrenk, W. T., and Browning, B. L., electrometric determination of tellurium in presence of ferric iron, selenium, and copper, A., 261.
determination of selenium and tellurium by means of potassium permanganate, A., 1115.

Schretter, G. I. Specific refraction of the total proteins of blood-serum. II. Specific refraction of serum albumin and globulin, A., 1267.

Schreyer, B. See *Skita, A.*

Schreyer, R., formation of citric acid from gluconic acid by *Aspergillus*, A., 147.

Schröder, H., coke ovens, (P.), B., 778.

Schröder, K., standardisation of thiosulphate solutions with potassium permanganate, A., 705.

separation of zirconium from titanium, A., 705.

Schroeder, M., adsorption of sulphur dioxide from gas mixtures, (P.), B., 321.
recovering gaseous constituents [sulphur dioxide] from gas-mixtures, (P.), B., 584*.

Schrödinger, E., Einstein's gas theory, A., 463.
 energy gradations in the ideal model of a monatomic gas, A., 555.

Schroeter, F., See Kordatzki, W.

Schroeter, G., constitution of aldehyde and ketone hydrogen sulphites, A., 1226.
 hydrogenation of naphthalene, (P.), B., 480*.

Schroeter, G. [with Finek, E.J.], isomerism between dimeric ketens and cyclo-butadienes, III., A., 731.

Schroeter, G., See also Riedel, J. D., A.-G.

Schröter, K., See Agte, K., and Samter, W.

Schryver, S. B., gelatin, B., 557.

Schryver, S. B., and Buston, H. W., isolation of some hitherto undescribed products of hydrolysis of proteins, II. and III., A., 749, 1019.

Schubert, F., See Ehrlich, F., and Fischer, Hans.

Schubert, F. W., See Brysika, Ltd.

Schubert, F., See Karrer, P.

Schuch, K. A., See Walde, H.

Schudel, J. G., and National Aniline & Chemical Co., purification of phenolphthalein, (P.), B., 578.

Schueler, G. R., centrifugal separator, (P.), B., 81*.

Schüler, H., new light-source and its possible uses, A., 215.
 first lithium spark spectrum, A., 765.

Schüler, H., and Wolf, A. L., continuous hydrogen spectrum, II., A., 213.

Schükle, E., determination of the pure wool content of raw wool, B., 737.
 is cellulose acetate silk superior to German [cellulose] silks? B., 737.

Schümann, J., purification of hydrocarbons, (P.), B., 184.

Schümann, E., and Böhm, W., analysis of refractory materials and other products rich in alumina, B., 90.

Schürmeyer, A., See Höber, R.

Schuetz, C. N., See Duschak, L. H.

Schütte, H., See Badische Anilin- & Soda-Fabrik.

Schuetz, H. A., See Harvey, E. H.

Schütz, F., See Gelsenkirchener Bergwerks-A.-G.

Schütz, L., See Ursun, W.

Schütz, O., and Ephraim, F., dependence of heat of formation of salts on the [atomic] volumes of their components, A., 1193.

Schütz, O., See also Ephraim, F.

Schütz, W., sphere of action of excited atoms, A., 216.
 phenomena accompanying the Zeeman effect in weak magnetic fields and the influence on them of added gases, A., 1072.
 optical evidence as to the orientation of atoms in a magnetic field, A., 1075.

Schütze, E., See Heller, G.

Schufan, P., determination of carbon monoxide in hydrogen, B., 405.

Schubacker, K., micro-wash-out pipette, A., 706.

Schulek, E., decomposition of standard sodium thiosulphate solutions, A., 1017.
 removal of dissolved oxygen from liquids [water]; detection of small quantities of oxygen in gas mixtures, B., 388.

Schulemann, W., Meisenburg, K., and Winthrop Chemical Co., pharmaceutical product [analgesic], (P.), B., 931.

Schulemann, W., Schönhofer, F., and Winthrop Chemical Co., antipyretic [α -acetoxy- ρ -methoxybenzoic acid], (P.), B., C92*.

Schulemann, W., See also Farbenfabr. vorm. F. Bayer & Co., and Kropf, W.

Schuler, H., electrical excitation of metal vapours in King's resistance furnace, A., 876.

Schulzen, H., determination of free calcium ions by Brinkmann and van Dam's method, A., 140.

Schulzen, J., See Rojahn, C. A.

Schulz, E., conversion of crude mineral or shale oils or tar oils into light oil or spirit and preparation of light oil or spirit from coal, lignite, or other carbonaceous material, (P.), B., 779.

Schulz, E. L., retort for carbonisation of shale, lignite, coal, etc., (P.), B., 651.

Schulz, E., drying plant, (P.), B., 616.
 small-range refractometer, B., 458.

Schulz, K., See Stelmkopf, W.

Schulz, G., See Hess, K.

Schulze, H., See Krolpfeifer, F.

Schulze, H. S., See Chem. Fabr. Griesheim-Elektron.

Schulze, K., capillary theory of the swelling and shrinkage [of gels], A., 473.
 capillarity and evaporation, II., A., 1094.
 capillarity and wetting, II., A., 1094.

Schulze, W., See Synthetic Ammonia & Nitrates, Ltd.

Schulz, P., phosphorus and calcium metabolism of young rachitic rats fed on a calcium-rich diet and treated with ultra-violet rays, cod-liver oil, and phosphates, A., 1181.
 effect of various methods of treatment on the calcium and inorganic phosphorus of the serum of rachitic rats, A., 1181.

Schulz, D. B., refractory materials, B., 540.

Schulz, E., See Roginski, S.

Schulz, E. H., and Fericli, R., absorption of nitrogen by iron in the basic open-hearth process, B., 670.

Schulz, E. H., and Jenge, W., heat treatment and testing of chromium magnet steel, B., 442.

Schulz, E. H., Jenge, W., and Bauerfeld, F., advances in high-speed alloys, B., 492.

Schulz, H., apparatus for manufacture of carbon disulphide, (P.), B., 823.

Schulz, H., See also Handovsky, H.

Schulz, Hans, use of light filters in polarimetric measurements, A., 593.
 refractometer, A., 931.
 lens-polariscopes, A., 1021.

Schulz, Hans, and Ewald, W., stiffness of paper, B., 47.

Schulz, J., See Bennewitz, K.

Schulz, M., accelerated paint testing, B., 924.

Schulz, M., and Krämer, F., Storch-Morawski (Liebermann) reaction for detection of resin (abietic acid) or resin compounds in paints, etc., B., 796.

Schulz, E. L., See Fry, H. S.

Schulz, F., See Gilman, H.

Schulz, G., See Keller, D.

Schulz, H., production of barium, strontium, and calcium peroxides, (P.), B., 322.
 production of barium oxide of high porosity and purity, (P.), B., 915.

Schulze, W. A., and Lochte, H. L., s -di- α -phenylethylhydrazine and related compounds, A., 608.

Schumacher, E. E., melting points of barium, strontium, and calcium oxides, A., 340.

Schumacher, J., behaviour of basic dyes to lipins, A., 324.

Schumacher, W., See Moldenke, R.

Schumm, O., conversion products of the pigments of flesh and blood. VI.
 Coprinin, substance derived from α -haematin by intestinal putrefaction, and the related porphyrin, A., 57.
 conversion products of the pigments of flesh and blood. VII. Muscle pigment and MacMunn's myohematin, A., 193.
 tests for blood; oxydase and haemochromogen reactions of yeast and plant seeds, A., 314.
 cytochrome, porphyrin arising from its hydrolysis, and the related porphyrin, A., 537.
 muscle pigment and MacMunn's myohematin, A., 537.

Schumacher, O. [with Dankmeier, W.J.], porphyrins and haemins. I. Identification of coproporphyrin, and value of spectrochemical methods for investigation of porphyrins and allied pigments. II. Haematin in pathological sera, A., 538.
 naturally occurring porphyrins and porphyrins, A., 751.
 porphyrin from yeast and seeds; does yeast contain blood pigment? A., 758.
 naturally occurring porphyrins and porphyrins, VII. Spectrochemical reaction of iron porphyrins with potassium hydroxide, sodium cyanide, and hydrazine hydrate, A., 968.
 coproporphyrin synthesis by means of yeast, A., 1018.
 conversion products of the pigments of flesh and blood; origin of coprinin in the spontaneous putrefaction of blood; spectroscopic reactions of crystallised coproporphyrin prepared from coprinin, A., 126S.

Schummu, O. [with Dankmeier, W.J.], presence of coprinin and detection of blood in faeces, A., 317.

Schummu, O., and Mertens, M. E., occurrence and detection of coprinin and coproporphyrin, IV., A., 1048.

Schummu, O., and Fapendieck, A., α -haematoxylophyrin (haemateric acid) and the so-called α -haematoxylophyrin, A., 1269.

Schupp, O. E., jun. See Buehrer, T. F.

Schnur, M. O., See Richter, G. A.

Schureck, H. G., salt glazing, (P.), B., 586.
 colour prevention [on clay ware], (P.), B., 586.

Schuster, C., See Meyer, K. H.

Schuster, F., theory of the state of matter. III. Relation between surface tension and the constants in the equation of state, A., 342.
 theory of the state of matter. IV. Molecular weight and critical data, A., 505.
 theory of the state of matter. V. Residual valency. VI. Critical volume, A., 670.
 Bergius process for the liquefaction of coal, B., 115.

Schuster, F., See also Weissenberger, G.

Schuster, M., See Heuser, E.

Schut, W., See Jansen, J. D.

Schub, E., See Abderhalden, E.

Schub, G. M., [additivity of the molecular volumes of volatile inorganic compounds], A., 661.

Schub, G. M., and Pietzsch, E., thermal decomposition of methane by a glowing filament, A., 918, 1109.

Schwabach, M., removal of residue from furnaces, retorts, or the like, (P.), B., 224*.

Schwaifeld, J., See Niklas, H.

Schwaiger, J., See Eibner, A.

Schwalbe, C. G., determination of moisture in fibrous materials, B., 9.
 utilising sulphite-cellulose [waste] lye, (P.), B., 49.
 purifying cellulose, (P.), B., 153.
 carbonising sulphite [cellulose waste] liquors with mordant salt solutions, B., 350.

Schwalbe, C. G., and Berndt, K., wetting spruce wood with calcium and magnesium bisulphite liquors, B., 531.

Schwalbe, C. G., and Lange, Werner, Guignet cellulose from wood cellulose and wood, B., 679.

Schwalbe, C. G., and Schep, R., conversion of lignous plant substances into coal. 111. Formation of sugars as an intermediate phase of the production of coal, B., 145.

Schwalbe, C. G., See also Chem. Fabr. Griesheim-Elektron.

Schwalbe, H., testing the strength of [paper] half-stuffs, B., 912.

Schwalm, E. D., soldering alloy, (P.), B., 197.

Schwanefeld, M., See Fromm, E.

Schwarz, H., See Deilmayr Chem. Fabr. A.-G., I.

Schwarz, C., coke cooling plant, (P.), B., 780*.

Schwarz, E., See Lange, E.

Schwarz, F., Gil-Camporro, E., and Leach, L., manufacture of varnish, (P.), B., 373.

Schwarz, G. L., and Du Pont de Nemours & Co., E. I., mixed esters [glycerides] of lower and higher fatty acids, (P.), B., 66.

Schwarz, G. M., and Leonard, R. J., alteration of spodumene in the Etta mine, Black Hills, South Dakota, A., 379.

Schwarz, K. W., and Chromium Products Corporation, chromium plating, (P.), B., 711.

Schwarz, K. W., See also Metal and Thermit Corporation.

Schwarz, O., See Roth, W. A.

Schwarz, A., See Farb. vorm. Meister, Lucius, & Brilning.

Schwarz, C., and Gewiss, E., physiology of digestion. XII. Attempted reactivation of salivary amylase inactivated by acid, A., 1274.

Schwarz, F., purifying mineral oil products, etc., (P.), B., 41*.

Schwarz, K., See Wieland, H.

Schwarz, L., See Kohn, M.

Schwarz, M., photochemical oxidation of methyl and ethyl alcohols by potassium dichromate, A., 253.

Schwarz, M. ton, examination of badly corroded brass condenser tubes, B., 411.

Schwarz, R., silica and its hydrates, A., 1112.
 sensitising photographic silver-halide emulsions for X-rays, (P.), B., 722.
 photographic layer, (P.), B., 805*.

Schwarz, R., and Diefenbacher, K., photochemistry of silver chloride, bromide, and thiocyanate, A., 635.

Schwarz, R., and Schinzingher, A., analysis of silicates, B., 319.

Schwarz, R., and Sexauer, W., compounds of silicon and nitrogen containing a silicon bridge, A., 369.

Schwarzbach, R., chlorine as a sterilising agent for water, especially for flood-water, B., 469.

Schwarzener, E., utilisation of material containing lime and bitumen [oil shale and oil-bearing chalk], (P.), B., 862.

Schwarzkopf, *J.*, production of stable cod-liver emulsions which deposit no sediment on keeping, (P.), B., 218.

Schweitzer, *A.*, nitrogen fixation by means of barium carbonate and coal in an electric oven, B., 272.

Schweitzer, *W. H.*, oxidation (chlorination) of textile materials made from animal fibres, wool, and silk, (P.), B., 782.

Schweitzer, *W. K.*, and Grasselli Chemical Co., preparation of insecticides, (P.), B., 458.

Schweitzer-Hennig, *F.* See L G. Farbenind. A.-G.

Schweizer, *C.*, review of industries based on yeast, B., 894*.

Schweizer, *F.* See Kalb, *L.*

Schweizer, *G.*, test for xanthine, A., 750.

Schweizer, *R.* See Bamberger, *K.*, and Dimroth, *O.*

Schweizer, *T.*, preservation of sap-containing feeding-stuffs by the electric current, (P.), B., 719.

Schweizer & Co., production of caffeine-free coffee, (P.), B., 297.

Schwalkehöhe Kohlenschwelungsges., and Young, *D.*, [destructive] distillation drums, (P.), B., 4.

Schwertel, *F.* See Fischer, *Hans.*

Schwezowa, *O.* See Kostychev, *S.*

Schwickier, *A.*, and Schay, *G.*, equilibrium point in the reaction between iodine and hydrobromic acids, A., 1007.

Schwieder, *F.* See Windaus, *A.*

Schwörer, *I.*, irrigation and soil reaction, B., 139.

Scientific and Industrial Research Department, Fuel Research, the Lancashire coalfield; the King seam, B., 568.

Scientific and Industrial Research Department, Gas Cylinders Research Committee, periodical heat treatment of gas cylinders, B., 727.

Scofield, *G. V.*, vacuum regulator, A., 932.

Scofield, *S. W.*, and Le Rue, *J. H.*, separating constituents of mineral silicates, (P.), B., 89.

Scales, *J. L.*, boiling rod to prevent bumping, A., 815.

Scopes, *D. L.* See also Test, *L. A.*

Scott, *A.* See Lloyd, *L. L.*

Scott, *A. C.*, and Mexico, Ltd., explosives, (P.), B., 422.

Scott, *A. C.*, and Sulman, *H. L.*, explosives [of the Sprengel type], (P.), B., 254.

Scott, *A. E.*, [smokeless] explosive mixture, (P.), B., 723.

Scott, *A. F.*, atomic numbers and the properties of ions in the crystal lattice. II. Characteristic frequency and the constraint, A., 662.

atomic numbers and the properties of ions in the crystal lattice. III. The metallic state, A., 994.

Scott, *D. A.*, chemical properties of insulin, A., 97.

Scott, *E. & Co. Ltd.* See MacGregor, *J.*

Scott, *E. L.* See Duggan, *W. F.*

Scott, *H.*, origin of quenching cracks [in steel], B., 749.

dimensional changes accompanying the phenomena of tempering and ageing of tool steels, B., 881.

Scott, *H. (Madison)*. See Hart, *E. B.*

Scott, *H. M.* See Clay, *R. Ltd.*

Scott, *J. M.*, and Peacock, *S.*, dephosphorising iron and steel, (P.), B., 196.

Scott, *J. T.* See Robbins, *W. J.*

Scott, *L. H.*, precise turbidity readings by electrical methods, B., 723.

Scott, *N. D.* See Conant, *J. B.*

Scott, *W.*, and Du Pont de Nemours & Co., *E. I.*, hard resinous vulcanisation accelerator, (P.), B., 289.

Scott, *W.*, and Rubber Service Laboratories Co., rubber-vulcanisation accelerator, (P.), B., 682.

Scott, *W. G.* See Ardsdale, *G. D. van.*

Scott, *W. M.*, rôle of chemistry in the manufacture of silk, B., 818*.

Scottish Dyes, Ltd., Beckett, *E. G.*, Thomas, *J.*, and Tonkin, *R.*, dyestuffs and dyeing of acetyl silk, (P.), B., 703.

Scottish Dyes, Ltd., Thomas, *J.*, Harris, *J. E. G.*, and Wylam, *B.*, preparation of [stable water-soluble derivatives of vat] dyes, (P.), B., 973.

Scottish Dyes, Ltd. See also Thomas, *J.*, and Thomson, *R. F.*

Scovill Manufacturing Co., electric furnaces, (P.), B., 592.

Scrieve, *E. W. jun.*, and Schramm, *E.*, deflocculation of clay slips and related properties, B., 488.

Scrive, *P.*, rotary drying apparatus, (P.), B., 114*.

rotary drying or torrefying apparatus, (P.), B., 145*.

Seatt, *W.*, germanium in a British mineral, A., 709.

Seailles, *S.* See Société "Lap."

Seal Co. (London), Ltd., Jascourt, *J.*, Pattinson, *H. D.*, and Rose, *J.*, electrolytic process for removal of rust and scale from metals, (P.), B., 196.

Searle, *V. H. L.*, oscillographic study of anodic polarisation, A., 1106.

Sears, *G. W.*, critical studies on the fusion of rare metal ores. II. Separation of tantalum and columbium [niobium], B., 282.

Sease, *V. B.* See Baldsiefen, *W. D.*

Sebald, *L. E.* See Griscom-Russell Co.

Sebor, *J.*, quantitative spectrum analysis, A., 590.

Sebor, *J.* See also Donath, *E.*

Sebrell, *L. B.*, Bedford, *C. W.*, and Goodyear Tire & Rubber Co., manufacturing thiiazoles, (P.), B., 771.

Sebrell, *L. B.*, and Goodyear Tire & Rubber Co., method of vulcanising caoutchouc, (P.), B., 599, 761.

Sebrell, *L. B.* See also Shaw, *D. N.*

Sechowski, *J.*, electric furnace, (P.), B., 65.

Seck, *W.*, and Lachmann, *H.*, wetting-out agents [for textile materials], B., 913.

Sédelain, *P.*, and Loiseleur, *J.*, fractionation of serum proteins and removal of proteins from antidiaphtheritic serum, A., 537.

Seberry, *J. B.*, grinding mill, (P.), B., 3*.

Sederholm, *P.* See Benedicks, *C.*

Sedgwick, *W. G.* See Haworth, *W. N.*, and Perkin, *W. H. jun.*

Sedlaczek, preparation of "treated oils," driers, etc., B., 1020.

Sedimayr, *R.* See L G. Farbenind. A.-G., and Kränlein, *G.*

Seehach, *F.* See Bakelite Ges.m.b.H.

Seeger, *F.*, furnace, (P.), B., 124.

Seede, *J. A.*, and General Electric Co., electric [induction] furnace, (P.), B., 886.

Seelke, *L.* See Sjollem, *B.*

Seligmann, determination of diastase in malt extract, B., 25.

Seeman, *H.*, X-ray spectroscopy of the Compton effect and of the Clark-Duane pseudo-lines, A., 330.

Seemann, *H. J.* See Glaser, *L. C.*

Segarra, *J. G.*, recovery of silver from precipitates in photographic solutions, (P.), B., 220.

Segel, *A.* See Kohn, *M.*

Seger, *E.* See Ephraim, *F.*

Seguin, *L.* See François, *M.*

Sehgal, *J. L.* See Bhatnagar, *S. S.*

Seibert, *F. B.*, isolation of a crystalline protein with tuberculin activity, A., 1062.

determination of protein and proteose, A., 1164.

chemical composition of the active principle of tuberculin. V. Effect of proteolytic enzymes on tuberculin proteins and the activity of tuberculin, A., 1178.

Seibert, *F. B.* See also Long, *E. R.*

Seibert, *F. M.* See Burrell, *G. A.*

Seidel, *F.*, anhydro-compounds of *o*-aminobenzaldehyde, A., 1140.

Seidel, *K.*, rhythmic reactions, A., 20.

Seidel, *A.*, concentrated vitamin-*B* from brewers' yeast, A., 644.

comparison of results obtained with the rat and the pigeon in testing for the antineuritic vitamin, A., 1181.

Seidenberg, *S.* See Rosa, *P.*

Seidenhauer, *F.*, production of coke and tar from coal, (P.), B., 397*.

distillation of lignite and recovery of the volatile sulphur, (P.), B., 654.

Seidenhauer, *F.*, and Pape, *H.*, agglomerating coal, (P.), B., 572, 731.

Seifken, *W.* See Lecher, *H.*

Seigle, *A. A. F. M.*, transforming and distilling hydrocarbons and the like, (P.), B., 352.

Seil, *G. E.*, determination of hydrocyanic acid in gaseous mixtures, B., 271.

Seil, *G. E.*, Hedenburg, *O. F.*, Moburg, *F. O.*, and Roessler & Hasslacher Chemical Co., insecticide, (P.), B., 30.

Seiliger, *S.* See Wehnelt, *A.*

Seitz-Werke G.m.b.H., filters, (P.), B., 807.

Sejví, *J.*, Winkler, *R.*, and Falkon, *M.*, means for detecting the presence of methane or other hydrocarbon gases, (P.), B., 940.

Seki, *T.*, Japanese volcangous ash-loams, A., 1119.

Selas Akt.-Ges., safety device for gas and air mixing plants and other industrial gas plants, (P.), B., 42*.

Selective Treatment Co., Ltd. See Dolbear, *S. H.*

Seligmann, *R.*, filter, especially applicable to milk and other potable liquids, (P.), B., 297.

heat exchange apparatus, (P.), B., 521*.

Seligmann, *A.*, low-temperature cooling, liquefaction, and separation of not easily condensable gases, (P.), B., 303.

Seligoth, *F.* See Pincussen, *L.*

Selskár, *A.* See Macela, *I.*

Sejjakov, *N.*, and Krasnikov, *A.*, doublet $K\beta_1$ [of manganese and chromium], A., 446.

Sejjakov, *N.* See also Zvjaginstsev, *O.*

Selke, *W.*, determination of ammonia in fertilisers by the formaldehyde method, B., 250.

Selle, *H.* See Kast, *H.*

Sellers, *W. G.* See Broadbridge, *H.*

Sellet, *L.*, preparation of a mordant [for cotton] in place of tannin, (P.), B., 153.

Sellheim, *H.*, Abderhalden's reaction; a new blood reaction, A., 86, 423*.

Selvig, *W. A.* See Fielder, *A. C.*

Semelet, *C.* See Boutaric, *A.*

Semenov, *N.*, and Schalnikov, *A.*, method of investigating chemical reactions in the solid phase, A., 1107.

Semeria, *G. B.*, and Pichetto, *A.*, pseudo-acids, A., 30.

Semicolon, *L.*, and Flanzly, clarification of saccharine solutions [musts and wines] with mercuric salts, B., 562.

pectins of grapes and the mellowness of wines, B., 844.

Semmens, *E. S.* hydrolysis of starch grains by light polarised by small particles, A., 691.

Semmens, *E. S.* See also Baly, *E. C. C.*

Sempre. See Arloing, *F.*

Sen, *J.*, standard methods of analysis of fertilisers, B., 505.

Sen, *K. C.*, stability of colloidal solutions. IV. Antagonistic effect of electrolytes on concentrated and dilute sols and a general theory of ion antagonism, A., 122.

theory of peptisation, A., 124.

permeability of membranes, A., 349.

viscosity of colloidal solutions in presence of electrolytes, A., 470.

chemical nature of adsorption, A., 572.

electrical phenomena at interfaces, A., 573.

influence of non-electrolytes on the precipitation of colloids by electrolytes and on the adsorption of ions, A., 576.

adsorption of ions in connexion with their coagulative power, A., 794.

stability of colloidal solutions. V. Effect of similarly charged ions as a factor in electrolyte antagonism in the coagulation of sols and the mechanism of stabilisation, A., 1004.

adsorption of similarly charged ions as stability factor in the dilution of sols, the acclimatisation, and the antagonistic action of electrolytes on the coagulation of colloids, A., 1004.

Sen, *M.*, and Rdy, *J. N.*, N,N -alkylated amidines, A., 606.

synthesis in the thiophene series. II, A., 734.

Senell, *G. H. van.* See Simplex Refining Co.

Senderens, *J. B.*, preparation of aliphatic ethers, A., 46.

preparation of ethers from aromatic alcohols, A., 517.

Sendju, *T.*, behaviour of the vitally important amino-acids during the incubation of the hen's egg, A., 1062.

Sendroy, *J. jun.* See Hastings, *A. B.*, and Van Slyke, *D. D.*

Senfleben, *H.*, electron affinity of oxygen, A., 768.

Senfleben, *H.*, and Rehren, *(Fr.) I.*, dissociation of the water molecule, A., 768.

Senftner, *G.*, production of bread [containing silica], (P.), B., 333.

Sengoku, *S.* See Azami, *K.*

Senn, *O.* See Melsenheimer, *J.*

Sensi, *G.*, and Revello, *M.*, toxicological considerations on the production of hydrocyanic and thiocyanic acids in the putrefying animal organism. I. and II. A., 1058.

Sensicle, *L. H.*, production of road tars without distillation, B., 310.

manufacture of prepared tar for road-making, etc., (P.), B., 909, 942.

Sennsenberg, *C.*, ammonia-absorption refrigerator, (P.), B., 145*.

Sequin, *L.* See François, *M.*

Serebrijski, *J.* See Vollmer, *H.*

Serejski, *M.*, antitrypsin, A., 543.

Sereni, E., oxydases. I. Formation of crystals of indophenol-blue in the presence of different colloids. II. Oxydase reaction in surviving preparations. III. Oxydase reaction in spermatozoa, A., 65.

Sergier, H., tin-plate for containers for food products (preserves, etc.), B., 418. utilisation of chlorinated water in canning and preserving process, B., 561.

Serini, A. See Meewissen, H.

Serles, E. R. See Hirschfelder, A. D.

Serres, (Mme) A., new magnetic state of the cobalt ion, A., 14.

Seshaiah, T. R. See Dey, B. B.

Sestini, Q., measurement of oxygen at high pressures, B., 875.

Seth, R. von. See Johansson, A.

Setoh, S., and Toriyama, Y., effect of atmospheric humidity on the dielectric losses and power factors in fibres insulating materials, B., 370.

Settimi, M., mobile-scale densimeters (modification of Quevenne's lactometer), B., 105.

Sive, P., spectrograph with a non-inclined plate, A., 112.

Severac, M. See Raiziss, G. W.

Severtzov, L., action of some antiseptics on soil amoebae in partially sterilised soils, B., 292.

Sevilia, J., alipine hydrochloride, A., 744, 963.

Sevon, J. See Ronfala, O.

Sewig, R., intensity measurements in band spectra, A., 223.

Sexner, W. See Schwarz, R.

Sexl, T., phenomena in dilute gases, A., 894. influence of adsorbed gas on the electrical resistance of a wire. II., A., 1196.

Seydel, K. See Badische Anilin- & Soda-Fabrik, and I. G. Farbenind. A.-G.

Seydel, P., and Seydel Chemical Co., oxidising aromatic side-chain compounds, (P.), B., 463.

Seydel Chemical Co. See Seydel, P., and Spencer, H. McC.

Seyer, J., and Standard Silk Dyeing Co., dyeing silk, (P.), B., 124. washable black silk piece goods and process for dyeing them, (P.), B., 121.

Seyer, W. P., and Ball, R. W., solubility of ethyl alcohol in liquid sulphur dioxide, A., 119.

Seyer, W. P., and Huggett, J. L., chemical constitution of a fraction of Peruvian petroleum boiling between 150° and 350°, B., 653.

Seyewetz, A., and Tatu, H., plumbeous ammonium chloride, A., 589.

Seyewetz, A. See also Lumière, A.

Seyfert, H. See Herbig, W.

Seyfert, E., production of very finely-divided copper powder, (P.), B., 885.

Seyler, C. A., nomenclature of the banded constituents of coal, A., 494.

Seymour, J. M., cooling towers, (P.), B., 808*.

Shafer, C. L. See Black, R.

Shaffer, S. S., and Taylor, N. W., effect of complex ion formation on the magnetic susceptibility of paramagnetic salts in aqueous solution, A., 567.

Shafrazi, R. W., Morrison, E., Brown, R. J., Stenger, L. A., Nees, A. R., and Great Western Sugar Co., producing a reaction of lime and sucrose in the manufacture of sugar from beets, (P.), B., 923.

Shah, S. V. See Windaus, A.

Shannan, W. V., and Gas Light and Coke Co., manufacture of organic compounds by reactions involving replacement of substituent atoms or groups with liquid reagents, (P.), B., 28*.

Shannon, E. V., identity of carrollite with linnacite, A., 709.

Shannon, E. V. See also Ross, C. S.

Shannon, (Miss) M. I. See Read, J.

Shapiro, C. V. See Orndorff, W. R.

Shapiro, L., increase in alkalinity on evaporation of sugar juices, B., 844.

Sharif, H., Noyes, H. M., and Falk, K. G., desiccated gonadal substances, A., 1270.

Sharma, H. S., and Desai, G. D., [laboratory] ovens, (P.), B., 31*.

Sharma, R. K., relation between the surface tension and viscosity of liquids, A., 464.

Sharma, R. K. See also Yajnik, N. A.

Sharp, P., [mechanical] treatment of jute, hemp, etc., (P.), B., 1010*.

Sharp, P. W. See Clark, G. W.

Sharp, T. M. See Henry, T. A.

Sharples, P. T. See Sharples Specialty Co.

Sharples Specialty Co., method of treating substances centrifugally and machines therefor, (P.), B., 113.

Sharples Specialty Co., Jones, L. D., and Ayres, A. U., centrifugal machines and processes, (P.), B., 343.

Sharples Specialty Co., Sharples, P. T., and Jones, L. D., purification systems for the lubricating oil of internal-combustion engines, (P.), B., 1006*.

Sharples Specialty Co. See also Ayres, E. E., and Jones, L. D.

Shatwell, H. G., hydrogenation and desulphurisation of Norfolk shale oil, B., 226.

Shatwell, H. G. See also Bowen, A. R.

Shaughnessy, H. J., and Criswell, K. I., salt action. X. Influence of electrolytes on the viability and electrophoretic migration of *Bacillus coli*, A., 203.

Shaver, W. W. See Littleton, J. T., jun.

Shaw, C. F., two unusual colloidal soils, B., 24.

Shaw, D. N., and Goodyear Tire and Rubber Co., vulcanising caoutchouc, (P.), B., 453.

Shaw, D. N., and Sebrell, L. B., chemical composition of rosin, B., 595.

Shaw, D. P., fractional distillation of wood, (P.), B., 5.

Shaw, E. H., jun., and Reid, E. E., derivatives of ethyl selenomercaptan, A., 497.

Shaw, G. N. See Marshall, M. J.

Shaw, J. A., stability of constant b.p. hydrochloric acid, A., 1220.

Shaw, M. B., and Bickling, G. W., comparative study of paper fillers, B., 313.

Shaw, R. See Waller Dove Bituminastic, Ltd.

Shaw, T. B., and Frederick, R. C., "blown" tins, B., 639.

Shaw, W. M. See MacIntire, W. H.

Shawfield, C. E. C. See Lever Bros., Ltd.

Shaybly, J. H., relationships between molecular diameter and density of a fluid, A., 468.

Sheard, C. See Mann, F. C.

Shearer, G., molecular orientation in solids, A., 1195.

Shearer, W. L. See Pressler, E. E.

Shearman, C. H., extraction of glue and fatty matters from bones and the like, (P.), B., 377.

Sheed, O. M., relation of some chemical constituents to the grades of Kentucky tobacco, B., 896.

Sheidlovsky, T. See MacInnes, D. A.

Sheely, C. See Wood, A. E.

Sheerer, L. F., effect of atmospheric conditions on the load test for refractories, B., 631.

Shell Co. of California, See Stewart, J. K.

Shelling, D. H. See Collens, W. S.

Shelton, G. R., action of sodium and magnesium sulphates on calcium aluminates, B., 91. action of sodium and magnesium sulphates on Portland cement, B., 825.

Shelton, H. J., grinder and pulveriser, (P.), B., 315.

Shemtchushnii, S. F., native platinum, A., 594. diagrams of state of some silver and alkali salts, A., 684. structure of native platinum, A., 1039.

Shenstone, A. G., physico-chemical study of natural gold and its origin, A., 1221.

Shepard, M. G. See Naugatuck Chemical Co.

Shepard, N. A., Krall, S., and Firestone Tire and Rubber Co., vulcanising rubber, (P.), B., 153.

Shepard, N. A., Krall, S., and Morris, H. L., factors influencing the weathering of vulcanised rubber, B., 598.

Shepherd, J. R. See Harrison, P. W. B.

Shepherd, R. T. See Chapman, D. L.

Shepherdson, A. See British Dyestuffs Corporation, Ltd.

Sheppard, S. E., reaction constant equation and a simple method of determining the end-point, A., 913.

Sheppard, S. E., sensitisation by nuclei of silver sulphide, B., 219.

Sheppard, S. E., characteristics and anomalies of emulsions on development. I., B., 466. supposed connexion between sensitisation of silver halide emulsions and the bleaching of dyes, B., 467.

Sheppard, S. E., effect of concentration of sensitiser on speed, and fog corrections, B., 773.

Sheppard, S. E., photographic sensitivity; a colloidal-chemical problem, B., 853.

Sheppard, S. E., Beal, C. L., and Eastman Kodak Co., electro-deposition of organic material such as rubber upon porous objects of non-conducting material such as fabrics, (P.), B., 793.

Sheppard, S. E., electro-deposition of organic materials such as rubber and cellulose compounds, (P.), B., 793.

Sheppard, S. E., Carver, E. K., and Sweet, S. S., time factor and yield value of cellulose esters, B., 187.

Sheppard, S. E., and Eastman Kodak Co., light-sensitive photographic materials, (P.), B., 341*.

Sheppard, S. E., changing the light-sensitivity of photographic emulsions, (P.), B., 805.

Sheppard, S. E., Eberlin, L. W., and Eastman Kodak Co., reducing the viscosity of nitrocellulose, (P.), B., 315.

Sheppard, S. E., electro-deposition of rubber, (P.), B., 598, 639.

Sheppard, S. E., electro-depositing rubber upon a metal wire, (P.), B., 794.

Sheppard, S. E., aqueous emulsion of unvulcanised rubber and sulphur, (P.), B., 794.

Sheppard, S. E., aqueous emulsion containing electrodepositable rubber and a cellulose compound; electro-deposition of coatings comprising rubber and a cellulose compound, (P.), B., 794.

Sheppard, S. E., and Trivelli, A. P. II., sensitivity of photographic emulsions in relation to quantum energy in exposure, B., 1030.

Sheppard, S. E. See also Trivelli, A. P. II.

Sherban, D. V., and Bonnot Co., drying apparatus, (P.), B., 2.

Sherban, D. V. See also Fuller-Lehigh Co.

Sherk, D. L., improving steam-distilled wood turpentine, (P.), B., 1021.

Sherman, E. See Hess, A. F.

Sherman, F. See Hess, A. F.

Sherman, H. C., and Cannock, M. L., storage of vitamin-A, A., 700.

Sherman, H. C., and Quinn, E. J., phosphorus content of the body in relation to age, growth, and food, A., 635.

Sherman, H. C., and Woods, E., determination of cystine by feeding experiments, A., 327.

Sherman, M. S. See Guernsey, E. W.

Sherman, O. H., Pucher, G. W., and Lohnes, H. R., blood chemistry of the newborn, A., 318.

Sherman, R. A., and Kinney, S. P., combustibility of blast-furnace coke, B., 348.

Sherppard, E. C. See Templeton, H. L.

Sherrell, M. S., and Noyes, A. A., inter-ionic attraction theory of ionised solutes. VI. Ionisation and ionisation constants of moderately ionised acids, A., 1006.

Sherrell, M. S. See also Dickinson, R. G.

Sherrell, R. E. See Desha, L. J.

Sherwin, C. P. See Adeline, M., Muenzen, J. B., and Novello, N. J.

Sherwin-Williams Co. See Holton, E. C., and Van Stone, N. E.

Sherwood, F. F., and Fulmer, E. I., effect of temperature on the growth of yeast in various media, A., 867.

Sherwood, F. F., and Hammer, B. W., citric acid content of milk, A., 1269.

Sherwood, F. W., gossypol and d-gossypol content of some North Carolina cottonseed meals, B., 564.

Sherwood, T. K., and Kilgore, A. J., absorption and desorption of ammonia in a coke-packed column, B., 706.

Shibata, E. See Ishikawa, F.

Shibata, K., formation of anhydrides of amino-acids and peptides, A., 505.

Shibata, Y., and Asahina, T., spectroscopic study of amino-acid anhydrides. I. Constitutions of some simple amino-acid anhydrides, A., 639.

Shibata, Y., Kimura, K., and Uemura, T., Japanese minerals containing rarer elements. I—III, A., 144.

Shide, J., reaction between gaseous methyl ether and hydrogen chloride, A., 21.

Shields, T. P., and Shields & Moore, alloy; gold alloy, (P.), B., 548. [white] gold alloy, (P.), B., 548.

Shields & Moore. See Shields, T. P.

Shikata, M., and Tachi, I., reduction potential of isovaleraldehyde, A., 1105.

Shima, G., electrolytic reduction of aldehydes. I. Formaldehyde and acetaldehyde, A., 147.

Shimadzu, G., manufacturing lead oxide, (P.), B., 539*.

Shimadzu, G., manufacturing powder of lead suboxide intermingled with powder of metallic lead, (P.), B., 539*.

Shimadzu, G., method of manufacturing metal powder, (P.), B., 549*.

Shimadzu, G., process of making plates for storage batteries using lead suboxide, (P.), B., 551*.

Shimadzu, G., paint, (P.), B., 551*.

Shimo, K., derivatives of hydroxyphenylglycine, I., A., 1243.

Shine, G. A., [rubber] paint, (P.), B., 680.

Shinoda, J., colouring matter of "fukugit." I. Constitution of fukugitin, A., 1235.

Shinoda, J. See also Robinson, R.

Shinoda, O., wild silk-moth, *Dictyoploca japonica*, Moore. I. Chemical development in growth, A., 196.

Shinrite, V. P. See Rao, B. S.

Shipley, P. G., Kramer, B., and Howland, J., calcification *in vitro*, A., 638.

Shirai, T., simple manometer for measuring low pressures, A., 933.

Shirono, S. See Machiguchi, E.

Shive, J. W. See Ginsburg, J. M.

Shive, R. A. See Buswell, A. M.

Shive, R. R., and Drakenfeld, B. F., & Co., apparatus and process for making glass, (P.), B., 407.

Shoaff, P. S., internal mixers for rubber stocks, B., 152.

Shoemaker, R. J., electroplating method, (P.), B., 163.

Shoepfer, H. See Zinke, A.

Shoemsmith, J. B., and Slater, R. H., preparation, hydrolysis, and reducton of the fluoro-, chloro-, and bromo-benzyl bromides, A., 389.

Shoemsmith, J. B., Sosson, C. E., and Slater, R. H., isomeric fluorobenzaldehydes and their derivatives, A., 1247.

Shohan, J. B. See Kohler, E. P.

Shohol, A. T. See McQuarrie, I.

Shoji, H., plasticity of metals. I., B., 752.

Shoji, H., and Mashiyama, Y., plasticity of metals. II., B., 752.

Sholl, R., potentiometer for the measurement of hydrogen-ion concentration, A., 1115.

Shonle, H. A., and Waldo, J. H., destructive action of acids, alkalis, and enzymes on insulin, A., 435.

Shono, T., condensation products of phenols and aldehydes. II. Colour reactions of the products formed by using ammonia as a catalyst, B., 595.

condensation products of phenols and aldehydes. III. Electrical properties, B., 680.

Shoppee, C. W. See Ingold, C. K.

Short, W. F., atomic volumes of carbon and hydrogen, A., 994.

modification of Baeyer's strain theory. I., A., 1028.

essential oil of manuka (*Leptospermum scoparium*), B., 511.

Short, W. F. See also Hosking, J. R.

Shriner, R. L., and Adams, R., structure of chaulmoogric and hydrocarpic acids, A., 47.

Shrivastava, D. L. See Menon, A. S.

Shukla, P. P. See Forster, M. O.

Shults, G. M. See Kubie, L. S.

Shutt, F. T., examination of Canadian sprayed apples for arsenic, B., 643.

Shutt, F. T., and Hedley, B., nitrogen compounds in rain and snow, A., 267.

Sibi, (Mlc.) M. See Thomas, P.

Sibilia, C., action of certain enzymes of *Fusarium*, A., 645.

Sibilla, F. G. See Wasley, T. J. J.

Sibor, S. A., Verrieres de Romont, manufacture of a glass, (P.), B., 747.

Sicher, S. See Feigl, F.

Sickel, H. See Abderhalden, E.

Siddiqui, S. See Braun, J. von.

Sideris, C. P., simple and efficient hydrogen electrode, A., 378.

Sidgwick, N. V., and Brewer, F. M., co-ordinated compounds of the alkali metals. II., A., 71.

Sidgwick, N. V., and Lewis, N. B., solubility of beryllium oxide in solutions of its salts, A., 787.

conductivities of some organic salts of beryllium, A., 1211.

Siebe, P., metallographic observations on cuprous oxide in copper, A., 786.

Siebel, G. See Tammann, G.

Sieber, H. See Helferich, B.

Sieber, H., effect of chemicals on paper-making properties of cellulose, B., 46.

testing of wood pulps with the large size Lampen ball mill, B., 86.

alkali loss in sulphate-cellulose manufacture, B., 187.

Sieber, W., use of potassium salts in printing [textiles], B., 819.

[preparation of] discharge printing pastes containing caustic soda and having no deleterious action on [copper] printing rollers, B., 820.

Sieber, W., and Unger, E., combustion of ammonia with oxygen, (P.), B., 156.

Siebler, G. See Danckwört, P. W.

Siedentopf, H., dark field illumination, A., 142.

anastigmatizing reflecting-condensers for dark-field illumination and microscopy, A., 1118.

Siedler, P. See Chem. Fabr. Griesheim-Elektron, Hock, L., and I. G. Farbenind. A.-G.

Sieg, L. P., crystalline nature of a sputtered tellurium film, A., 1085.

Siegbahn, M., and Thoreus, R., high-vacuum X-ray spectrometer, A., 1020.

Siegel, A. See Lindner, J.

Siegel, H. See Skita, A.

Siegel, R., pharmacology of pinocamphone, verbanone, verbenone, and camphor. V. Chemical constitution and physiological action, A., 320.

Siegel, W., manufacturing sodium fluoride from silico-fluorine compounds, (P.), B., 538.

Siegener Maschinenbau Akt.-Ges., and Menzel, A., gas producer for the distillation of fine-grained or dusty fuel, (P.), B., 654.

Sieger, H. See Hahn, F. L.

Sieger, E., distribution equilibrium, degree of dissociation, and electromotive force, A., 577.

Sieger, E. H., and Popenoe, C. H., insecticide, (P.), B., 717.

Sielisch, J., determination of anthracene by the Rüttgers method, B., 941.

Sielisch, J., and Köppen-Kastrop, P., principles of the determination of anthracene by the Rüttgers method, B., 941.

Sielemann, H. See Engelhard, A.

Siemens & Halske Akt.-Ges., production of membranes of parchment paper for osmotic purposes, (P.), B., 114.

optical pyrometers, (P.), B., 114*.

preparation of gold [from mercury], (P.), B., 370.

hydrogenation of artificial and natural rubber, (P.), B., 453.

electrolytic production of hydrogen peroxide, (P.), B., 666.

electric furnaces, (P.), B., 676.

purification of mercury by distillation, (P.), B., 711.

Siemens & Halske Akt.-Ges., and Dubme, E., apparatus for the production of electrolytic iron, (P.), B., 62.

Siemens & Halske Akt.-Ges., and Erlwein, G., sterilising water and other liquids, (P.), B., 170.

Siemens & Halske Akt.-Ges., and Fetkenheuer, B., manufacture of hard alloys [of cobalt, chromium, and tungsten], (P.), B., 197.

hard alloys for use in the manufacture of tools, (P.), B., 549.

hard alloys which contain silicon and carbon in addition to other substances, (P.), B., 549.

Siemens & Halske Akt.-Ges., Frederick, L., and Rodenhauser, W., decarbonisation of ferrochromium, (P.), B., 412.

Siemens & Halske Akt.-Ges., and Gerdien, H., electrolytic iron, (P.), B., 163.

Siemens & Halske Akt.-Ges., Gross, R., and Stadlhuber, M., kiln [with electric heating for lime-burning, etc.], (P.), B., 331.

Siemens & Halske Akt.-Ges., Harries, C., and Nagel, W., dispersion of unbleached shellac, (P.), B., 451.

Siemens & Halske Akt.-Ges., and Weyl, A., purification of filter diaphragms in electrolytic processes, (P.), B., 886.

Siemens & Halske Akt.-Ges. See also Dubme, E., Hosenfeld, M., and Moeller, M.

Siemens Gebrüder & Co., production of material containing silicon and carbon, (P.), B., 322.

electrodes for electric furnaces, (P.), B., 886.

Siemens-Schuckertwerke G.m.b.H., coating welding electrodes, (P.), B., 245.

jacketed welding electrodes, (P.), B., 245.

separation of condensable products [from distillation gases] by electrical precipitation, (P.), B., 262.

electrical gas purification, (P.), B., 281.

electrodes for the purification of gases, (P.), B., 412.

electrical precipitation of suspended particles from gases, (P.), B., 413.

electric gas purifier plants, (P.), B., 146.

absorption refrigerating apparatus, (P.), B., 519.

plant for drying fruits, together with installation for electrical precipitation of dust, (P.), B., 523.

apparatus for boiling ["bumping"] liquids, (P.), B., 647.

Siemens-Schuckertwerke G.m.b.H., and Hahn, C., dust removal in lignite briquetting works, (P.), B., 261.

Siemens-Schuckertwerke G.m.b.H., and Heinrich, R., electrical precipitation of suspended particles from gases, (P.), B., 177.

electrical purification of gases, (P.), B., 498.

discharge electrode for electrical gas purification, (P.), B., 498.

plant for electrical precipitation, (P.), B., 498.

Siemens-Schuckertwerke G.m.b.H., Heraeus-Vacuumschmelze Akt.-Ges., and Rohn, W., electric furnaces for bright annealing, (P.), B., 831.

Siemens-Schuckertwerke G.m.b.H., Kaufmann, O., and Cramer, E., electrical apparatus for preserving sap-containing fodder, (P.), B., 297.

Siemens-Schuckertwerke G.m.b.H., Schenkel, M., Mayer, H., and Hahn, C., precipitating suspended particles from gases or insulating liquids by means of electric fields, (P.), B., 886.

Sierp, utilisation of sewage for gas production, B., 78.

Sierp, F. See Imhoff, K.

Sierra, J. M. See Mikal, L.

Siersch, E., comparative tests on the Mäule [permanganate] and phloroglucinol reactions for the detection of lignification, A., 1231.

Sierun, S. E., manufacture of chamotte bricks, (P.), B., 14*.

kiln for production of iron sponge, (P.), B., 673.

production of fire-proof bricks, (P.), B., 1016.

Sievers, O. See Cassella & Co., L.

Sieverts, A., and Gotta, A., heats of formation and densities of hydrides, A., 340.

Sieverts, A., and Roell, E., absorption of hydrogen by praseodymium and neodymium, A., 356.

zirconium, thorium, and hydrogen, A., 810.

Sigmund, F., and Wessely, F., α -amino- N -carboxylic anhydrides. II., A., 960.

Sigmund, F. See also Franke, A., and Wessely, F.

Sigot, A. See Hackspill, L.

Sikka, I. S. See Dnnncliff, H. B.

Silberman, H., preparation of a binding material for cement, mortar, etc., (P.), B., 55.

obtaining pure cellulose fibre from impure material containing incrusting substances, (P.), B., 913.

Silberrad, O., sulphuryl chloride. IV. New chlorinating agent. Preparation of polychloro-derivatives of toluene, A., 158.

Silberrad, O., and Boake, Roberts & Co., Ltd., A., chlorination of organic compounds [by sulphuryl chloride in presence of catalysts], (P.), B., 1029.

Silesia Verein Chem. Fabr., production of symmetrical diarylguanidines, (P.), B., 995.

Silesia Verein Chem. Fabr., and Flemming & Klein Wissenschaft. Chem. Laboratorium, preparation of di-substituted thionuracil [thiocarbamides] of symmetrical structure, (P.), B., 721*.

Silica Gel Corporation. See Miller, E. B., and Patrick, W. A.

Siller, R., chill-cast alloy resistant to the action of acids and alkalis, (P.), B., 549.

Sillers, F., jun. See Freeman, J. R., jun.

Sills, T. L. See Goodwin, L. F.

Silsbee, C. G. See Jackson, R. F.

Silsbee, J. L., recovering potassium chloride from brine, (P.), B., 788.

Siluminite Insulator Co., Ltd. See Brown, A. H.

Silva, F., mill, (P.), B., 424.

Silver Springs Bleaching and Dyeing Co., Ltd., and Hall, A. J., processes in which cellulose acetate artificial silk and like products are treated with hot liquors, (P.), B., 317.

dyeing cellulose acetate products in [oxidation] black shades, (P.), B., 976.

Silverman, A., fifty years of glass-making, B., 824*.

Simanov, J. See Vedenys, B.

Simeon, F., and Dreblow, E. S., principal series of the copper arc spectrum, A., 102.

Simm, D., M., measurement of the emulsifying power of soap solutions by means of the drop-number, B., 759.

Simmich, H., commercial caramels and molasses colouring substances, B., 336.

Simmonds, N. See McCollum, E. V.

Simmons, R. H. See Cable, D. E.

Simmons, H. S., dissociation of multivalent substances. I. Relation of constants to titration data. II. Relation of constants to chemical structure, A., 881.

Simons, H. S. See also Levene, P. A.

Simon, A., action of varying concentrations of cations on the osmotic resistance of blood-corpuscles, A., 535.

linoleum and triolin, B., 21.

Simon, A., and Poehlmann, H., hydrates of antimony trioxide, A., 124.

Simon, A., and Schmid, T., oxides of chromium, A., 697.

Simon, A. See also Wilke-Dörfurt, E.

Simon, A. W. See Compton, A. H.

Simon, E. See Neuberg, C.

Simon, F., and Lange, F., eutropy of amorphous substances, A., 1000.

Simon, F. R. See Simon, W. G.

Simon, H., Ltd. See Denham, H. J.

Simon, J. L., viscosity and chemical analogy with reference to the viscosity of aqueous metallic acetate solutions, A., 21.

preparation of xanthone, preparatory to that of xanthydroxyl, A., 842.

Simon, O., making cement and mortar, (P.), B., 159.
 Simon, P., and Zeidler, W., specific heats at low temperatures; (a) specific heats of sodium, potassium, molybdenum, and platinum; (b) deviation of chemical constants of monatomic gases from theoretical values, A., 1103.
 Simon, R. See Haffner, R.
 Simon, R. H., and Schollenberger, C. J., acetone method of extracting sulphur from soil, B., 70.
 rate of oxidation [in soil] of different forms of elementary sulphur, B., 208.
 Simon, S. See Lené, E.
 Simon, W. G., and Simon, F. R., drying, heating, or cooling machines, (P.), B., 967.
 Simon-Carves, Ltd. See Robinson, A.
 Simoncini, E., urine as a mordant in the dyeing of glove skins, and its replacement, B., 49.
 Simonnet, H. See Fabre, R.
 Simons, E. See Waldschmidt-Leitz, E.
 Simons, F. L., catalytic decomposition of simple glycerides, A., 936.
 Simonsen, J. L. See Gibson, C. S., Iyer, S. N., Kanga, D. D., Panicker, P. M. R., Penfold, A. R., Rao, B. S., and Rau, M. G.
 Simpkin, N., composition of durain, B., 569.
 Simpkin, N. See also Macpherson, H.
 Simplex Refining Co., and Kramer, G. A., distillation of lubricating oils from mineral oils, (P.), B., 908.
 Simplex Refining Co., Kramer, G. A., and Senden, G. H. van, producing lubricating oils by distillation, (P.), B., 1005.
 Simplex Refining Co. See also Cameron, W., Jurreissen, A., and Pyzel, D.
 Simpson, G. E., effect of sleep on urinary chlorides and pH , A., 540.
 Simpson, G. S. See Crossley, M. L.
 Simpson, W. W., effects of asphyxia and isletectomy on the blood-sugar of *Myocephalus* and *Ameiurus*, A., 974.
 Simpson, W. W. See also Chaikoff, I. L.
 Sims, C. J., and Mardles, E. W. J., effect of metallic sols in delaying detonation in internal-combustion engines, B., 617.
 Sims, C. J. See also Callendar, H. L.
 Sims, J. M., and Brooks, O. M., bolted steel tube still for distilling oil, (P.), B., 574.
 Sinclair, D. J. See McGookin, A.
 Sinclair, W. B. See Harris, J. L.
 Sinclair, W. M., manufacture of aldehydes, oils, and organic oils from eacti, (P.), B., 252.
 Sinclair Oil and Gas Co. See Bernard, H. B.
 Sinclair Refining Co., oil cracking stills, (P.), B., 120.
 Sinclair Refining Co., and Bell, J. E., oil cracking stills, (P.), B., 40.
 Sinclair Refining Co., Herthel, E. C., and Pelzer, H. L., cracking hydrocarbon oils, (P.), B., 352.
 cracking of hydrocarbons, (P.), B., 908.
 Sinclair Refining Co. See also Bell, J. E., Herthel, E. C., and Isom, E. W.
 Sindl, O. See Hawlik, H.
 Sindler, A., chlorine in blood; sodium chloride in blood and secretion of gastric juice, A., 856.
 Sindlinger, F. See Mach, F.
 Sinehnikov, K. See Kurchakov, T.
 Singer, F., physical properties of ceramic bodies, B., 823.
 Singer, O. See Feigl, F.
 Singer, P. A., device for treating [extracting] material, (P.), B., 209.
 process of manufacturing starch products, (P.), B., 210.
 Singer, R., and Kunstarzfabr. Regal & Co., manufacture of artificial resins, (P.), B., 838.
 Singh, B. See Bhattacharjee, S. S.
 Singh, B. K., and Puri, A. N., dependence of optical rotatory power on chemical constitution. VI. Rotatory powers of phenyl-, *o*-, *m*-, *p*-tolyl, and β -naphthyl derivatives of *d*-camphorimide and *d*-camphorimic acid, A., 457.
 Singh, B. K. See also Lowry, T. M.
 Singh, B., *p*-dimethylaminodiphenylacetic acid, A., 65.
 Singh, H. D. See Annett, H. E.
 Singh, K. See Hamid, M. A.
 Singh, L. See Wirth, E. J.
 Singh, P., and Majithia, S. K. S., refining of saccharine liquids, (P.), B., 294.
 Singh, S. See Dunnill, H. B.
 Singleton, C. H., nitrogen availability studies on crops harvested at different stages of growth, B., 842.
 Singleton, W. See General Electric Co., Ltd.
 Singkinson, E., and Turner, H. G., adsorption of carbon dioxide by coal, B., 697.
 Sinnatt, F. S. See Newall, H. E.
 Sinozaki, H., and Hara, R., catalytic oxidation of hydrocyanic acid. II., A., 1110.
 automatic crystal, A., 1118.
 Sinozaki, H., Hara, R., and Mitsukuri, S., vapour pressure of hydrogen cyanide, A., 670.
 Sipp, K., and Lanz, H., gray cast iron, (P.), B., 97*.
 Sircana, F. See Gastaldi, C.
 Sircar, A. C., and De, P. K., heterocyclic compounds. I., A., 416.
 Sirius Werke Akt.-Ges., and Brunner, J., gas purifying agent capable of regeneration, (P.), B., 262.
 Sisco, F. T., chemical reactions of the basic electric [steel] process, B., 367*.
 Siverst, C. See Maass, O.
 Sivó, R. See Enriques, E.
 Sivola, G., chemical pulp-cooking process, (P.), B., 783.
 Siwon, P. See Schmitz, E.
 Sixt, leaching copper matte and speiss with nitric acid, B., 16.
 Sizer, A. W., extraction of oil from oil-bearing substances, (P.), B., 166.
 Sizoo, G. J., De Haas, W. J., and Onnes, H. K., influence of elastic deformation on the magnetic disturbance of the superconductivity of tin; hysteresis phenomena, A., 667.
 Sizoo, G. J., and Onnes, H. K., experiments with liquid helium. X. Electric superconductivity of pure metals, etc. XIV. Influence of elastic deformation on the superconductivity of tin and indium, A., 230.
 experiments with liquid helium; properties of super-conducting metals in the form of thin films, A., 564.
 Sizoo, G. J. See also De Haas, W. J.
 Sjöberg, K. See Klaslon, P.
 Sjölema, B., and Seekles, L., enol-keto desmotropism in 2-thio-5-methylhydantoins, A., 414.
 action of acetoxy anhydride on methylglyoxal, A., 1227.
 Sjölema, B., and Seekles, L., sugar from methylglyoxal in normal animals, A., 1272.
 Skalinska, M., pigment in tegument of seeds of *Phaseolus vulgaris*, A., 1183.
 Skaupey, F., [coating electrodes of] discharge tubes, especially low-voltage glow lamps, (P.), B., 332.
 Skreen, J. R., critical pH for the formation of hardpan in acid clay soils, B., 21.
 Skinner, A. F. See Irvine, (Sir) J. C.
 Skinner, C. E. See Waksman, S. A.
 Skinner, H. W. B., polarised emission of mercury lines, A., 329.
 excitation of polarised light by electron impact, A., 1074.
 Skinner, J. J., and Bule, T. S., sources of ammonia, B., 960.
 Skipsey, A. See Poache, S. J.
 Skita, A. [with Warnat, K., Wulff, C., Siegel, H., and Schreyer, B.], preparation of hydrogenated, polynuclear quinones, A., 173.
 Skobeltzyn, D., distribution of intensity in the spectrum of γ -rays, A., 1077.
 Skoglund, J. V., method of manufacturing sulphuric acid, (P.), B., 12.
 Skogstrom, J. A. See Williams, J. W.
 Skoog, R. W. See Vorees, G. L.
 Skrabal, A., and Eger, H. H., velocity of hydrolysis of the simplest formals, A., 1010.
 Skrabal, A., and Sawiuk, J., velocity of hydrolysis of mixed acyl acetals, A., 1010.
 Skrabal, A., and Zaborka, A., hydrolysis of ethyl acetoacetate by acids, A., 914.
 Skrabal, A., and Zlateva, M., hydrolysis of the acetals of pentarythritol, A., 681.
 Skraup, S., and Böhm, K., reactivity of the methylene group, A., 722.
 Skraup, S., and Eisemann, M., halochemistry. III. Densities of some molecular compounds, A., 999.
 Skraup, S., and Guggenheim, S., superheating of uniform organic compounds. II. Mono- and di-ketones, A., 170.
 Skrap, S., and Wolfschlag, F., preparation of trichloropyruvic acid, (P.), B., 216.
 Skraup, S. See also Rheinische Kampfer-Fab. G.m.b.H.
 Slack, C. M., refraction of X-rays in prisms of various materials, A., 781.
 duration of radiation excited in hydrogen by 10.2-volt electron impacts, A., 875.
 Slade, R. E. See Synthetic Ammonia & Nitrates, Ltd.
 Slansky, P., and Deutsche Linoleum-Werke Hansa, linoleum cement, (P.), B., 451.
 Slater, J. G., and Turner, T. H., hardness of carbon steels at high temperatures, B., 491, 882*.
 Slater, J. C., interpretation of the hydrogen and helium spectra, A., 101.
 alternating intensities in band lines, A., 452.
 spinning electrons and the structure of spectra, A., 554.
 dynamical model for complex atoms, A., 991.
 nature of resonance radiation, A., 1078.
 measurement of the compressibility of the alkali halides, A., 1198.
 Slater, H. H. See Kermack, W. O., and Shoesmith, J. B.
 Slater, W. F. See Kirkham, Hulett, & Chandler, Ltd.
 Slator, A., calculation of percentage of alcohol and other factors in fermented worts, B., 844.
 Slattery, M. K. See Nichols, E. L.
 Slawinski, A., conductivity of an electrolyte containing dielectric spheres, A., 1211.
 Sleator, W. W., and Phelps, E. R., fine structure of the near infra-red absorption bands of water vapour, A., 222.
 Slemr, B. See Milbauer, J.
 Slepian, J., theory of current transference at the cathode of an arc, A., 552.
 Sloan, A. W. See Conant, J. B.
 Slobodzka-Zaykowska, N., protective action of milk yeasts on cultures of lactic acid bacteria, A., 545.
 Sloman, H. A. See Stott, V. H.
 Slotta, K. See Blitz, H.
 Sluiter, (Miss) E., supposed influence of kevulose and the action of magnesium salts on the coagulation of citrate and phosphate-blood, A., 123, 536*.
 Sluiter, (Miss) E., and Kok, J., reducing power of blood *in vitro*, A., 969.
 Slyke, van. See Van Slyke.
 Smail, A. E., recovery of metal and other values from ores, (P.), B., 756.
 Smail, A. E. See also Mabee, H. C.
 Small, L. F. See Conant, J. B.
 Smalley, O., special nickel brasses, B., 58.
 Smallwood, A., and Fallon, J., furnaces [for reheating, etc.], (P.), B., 792*.
 Smekal, A., electrical conductivity in single crystals and in crystal aggregates, A., 564.
 anomalous scattering of α -particles, A., 772.
 spontaneous non-radiating quantum processes, A., 1192.
 Smeykal, K. See Freudenberg, K.
 Smith, F. L., & Co., liners for tube and like mills, (P.), B., 856.
 Smith, F. L., & Co. See also Lindhead, P. T., and Middleboe, K.
 Smiles, S. See Brooker, L. G. S., Child, R., Footer, H. B., Gaundlett, J. M., and Hurley, W. R. H.
 Smirnov, A. I., intensity of respiration and content of peroxidase in leaves of *Acer negundo*, A., 645.
 Smirzit, R. See Sachs, G.
 Smut, R. See Musohter, F. J. F.
 Smith, A. H., Cowgill, G. R., and Groll, H. M., technique for studying vitamin-B, A., 207.
 Smith, A. H. See also McKee, M. C.
 Smith, A. W., and Boord, C. E., infra-red absorption in ethers, esters, and related substances, A., 775.
 Smith, A. W., and Varney, W. W., manufacture of prepared charcoal, (P.), B., 5.
 Smith, A. W. See also Frayne, J. G.
 Smith, C., continuously-operated kiln, (P.), B., 543.
 Smith, C. S., preparation of colloid solutions, (P.), B., 224*.
 Smith, C. S., and Hayward, C. R., action of hydrogen on hot solid copper, B., 829.
 Smith, D. J. See White, H. T.
 Smith, D. M., spectrum of zinc, A., 1071.
 Smith, D. P. See Halstead, T., and Mehl, R. F.
 Smith, D. T. See Dedlow, C.
 Smith, E. C., determination of acetone substances by the Van Slyke method, A., 1283.
 Smith, E. C. See also Raper, H. S.
 Smith, E. R., Alford, S., and Mitchell, L. C., detection of added pepper shells in pepper, B., 895.
 Smith, E. W., Finlayson, T. C., Spiers, H. M., and Townend, F. S., coke production, B., 257.
 Smith, E. W. See also Woodall-Duckham (1920), Ltd.
 Smith, F. B. See Jones, T. G. H.

Smith, F. J. See Boyd, D. R.

Smith, G., detection and determination of glycerol in cotton cloths and sized yarns, B., 530.

Smith, G. B. L. See Browne, A. W.

Smith, G. F. See Soper, F. G.

Smith, G. M., ionic activity *versus* concentration in the interpretation of equilibria between amalgams and aqueous sodium and potassium mixtures, A., 796.

Smith, G. W., and Weisser, F. L., carburetted water-gas plant, (P.), B., 573.

Smith, G. W. See also Katz, S. H.

Smith, H. B., treating silk, (P.), B., 404*.

Smith, H. C. See Robinson, P. L.

Smith, H. E., influence of strain on the Thomson effect, A., 115.

Smith, H. G. See Carter, P. G., and McLennan, J. C.

Smith, H. H., and Chick, H., maintenance of a standardised breed of young rats for work on fat-soluble vitamins, A., 436.

Smith, H. H. See also Hume, E. M.

Smith, H. L., and Cooke, J. H., determination of very small quantities of iron, A., 1222.

Smith, H. W., action of acids on turtle heart-muscle with reference to the penetration of anions, A., 639.

Smith, Homer W., tobacco denicotinisation, (P.), B., 465.

Smith, J. See Rule, H. G.

Smith, J. A., plated article and its manufacture, (P.), B., 197.

Smith, J. C., [production of] water-gas, (P.), B., 182.

Smith, J. C., and Crow, F. B., flash-points of paints and varnishes, B., 534.

Smith, John Charles. See Allan, J., Duin, C. F. van, and Robinson, R.

Smith, J. D. M., analytical crucible, A., 41.

 crucible methods of analysis, A., 260.

Smith, J. D. M. See also George, W. & J., Ltd., and Morgan, G. T.

Smith, J. G. See Gile, P. L.

Smith, J. H. C., and Spoehr, H. A., atmospheric oxidation. II. Kinetics of oxidation with sodium ferro-pyrophosphate, A., 249.

Smith, J. H. C. See also Spoehr, H. A.

Smith, L., and Olson, H., dependence of the rate of alkaline hydrolysis on the constitution of the alcohol. II., A., 33.

Smith, L. B., Richmond, E. A., and Meulen, P. A. van der, attractant for insects, (P.), B., 336.

Smith, L. E., luminescence of pure barium bromide under the action of α -, β -, and γ -rays, A., 1077.

 effect of the process of manufacture on the properties of calcined gypsum, B., 790.

Smith, L. E. See also McBain, J. W.

Smith, L. F. See Kon, G. A. R.

Smith, L. G., nitrogen content of worts and their beers, B., 602.

Smith, L. I., and Dobrovolny, F. J., reaction between duroquinone and sodium malonic esters, A., 836.

Smith, L. T. See Lyons, R. E.

Smith, M., minimum endogenous nitrogen metabolism, A., 755.

Smith, M. See also Beckman, T. E.

Smith, N. A. C. See Sayers, R. R.

Smith, N. H. and Lankens, H. S., green colour of tungsten trioxide, A., 258.

Smith, N. R., and Worden, S., plate counts of sole micro-organisms, B., 335.

Smith, O. H., and Naugatuck Chemical Co., treating rubber, (P.), B., 23*.

Smith, O. M., and Wood, R. E., inhibiting agents in the oxidation of unsaturated organic compounds, B., 713.

Smith, P. See also Elsion, G. D., and Oliver, J.

Smith, R. A., absorption of gases by charcoal, I., A., 1001.

Smith, R. B. See Borne Scrymser Co.

Smith, R. C., effect of gum arabic and other emulsifiers on the acid hydrolysis of esters in heterogeneous systems, A., 23.

 reaction constant equation and a simple method of determining the end-point, A., 362.

Smith, R. C., and Paterson, H. A., determination of the rate of hydrolysis of sparingly soluble esters, A., 530.

Smith, S., and Lang, R. J., standard wave-lengths for use in the extreme ultraviolet, A., 873.

Smith, S. See also Lang, R. J.

Smith, S. C., heating of liquids by direct contact with combustion products; combustion reactions and their utilisation, (P.), B., 32.

 treatment of ores or residues containing zinc, (P.), B., 97*.

 process of forming sulphite of lead, (P.), B., 488*.

 process of making lead sulphate, (P.), B., 489*.

Smith, S. W., liquation in molten alloys and its possible geological significance, B., 281.

Smith, T. A., treatment of liquids [continuous-current washing of mineral oils], (P.), B., 80.

Smith, T. B., neutrality of ammonium sulphate, B., 358.

 apparatus for drying and neutralising ammonium sulphate, etc., (P.), B., 915.

Smith, W. See Winter, L. B.

Smith, W. C., [with Mountain, E. D.], volcanic rocks of Christmas Island (Indian Ocean), A., 194.

Smith, W. S., Poppleford, N., and Garnett, H. J., magnetic alloy, (P.), B., 496*.

Smith, W. S. See also Imhoff, W. G.

Smith Separator Co., and Waters, M. F., scrubber for separating oil and other liquid particles from gas, (P.), B., 430.

Smith & Sons Manuf. Co., L. S. See Vogt, C. C.

Smithells, C. J., devitrification of a lead borate glass, B., 746.

Smithells, C. J., Rookesby, H. P., and Pitkin, W. R., deformation of tungsten crystals, A., 997.

Smithells, C. J. See also General Electric Co.

Smits, A., transmutation of elements; lead, A., 106.

 transmutation of elements, A., 554.

 alleged preparation of artificial gold from mercury, A., 1015.

 influence of intensive drying on inner equilibria, II., A., 1206.

Smits, A., De Liefde, W., Swart, E., and Claassen, A., influence of intensive drying on inner equilibria, III., A., 1206.

Smits, A., and Schoenmaker, P., complexity of the solid state. III. and IV. Behaviour of pure sulphur trioxide. II. and III., A., 669, 785.

Smolik, L., electrode for hydrogen-ion determination using quinhydrone, A., 927.

Smorodinev, I. A., and Abova, A. N., buffers in the study of proteases. I. Measurement of the p_H in the determination of pepsin by Gross' method. II. Influence of buffers on the digestion of caseinogen by pepsin, A., 94.

Smorodinev, I. A., and Abova, A. N., buffers in the study of proteases. III. Influence of buffers on the p_H during the digestion of caseinogen by the method of Gross, A., 202.

preparation of standards for the colorimetric determination of pepsin, A., 322.

kinetics of the action of pepsin on fibrin, A., 322.

preparation of trypsin, A., 1276.

Smorodinev, I. A., and Danilov, F. K., effect of members of the quinine group on the enzymic functions of the organism. III. Influence of some quinine and carbamide compounds on pancreatic lipase, A., 94.

effect of members of the quinine group on the enzymic functions of the organism. V. Effect of concentration of the substrate on the hydrolysis of triacetin by pancreatic lipase, A., 202.

hydrolysis of triacetin by pancreatic lipase in presence of certain compounds of quinine and carbamide, A., 640.

Smorodinev, I. A., and Lemborg, C. S., effect of members of the quinine group on the enzymic functions of the organism. IV. Influence of quinine salts on pepsin, A., 94.

Smorodinev, I. A., and Riaboushinski, N. P., influence of arsenic and antimony compounds on enzyme activity. III. Peptid hydrolysis of caseinogen, A., 433.

Smyth, H. D., collisions of the second kind, A., 1.

 collisions of the second kind in monatomic iodine, A., 1075.

Smyth, H. D., and Barton, H. A., second ionising potential of argon, A., 1073.

Smyth, H. D., and Brasfield, C. J., secondary spectrum of hydrogen and the occurrence of H_2^+ , A., 881.

Snapper, J., and Grünbaum, A., β -hydroxybutyric acid content of muscle and liver, A., 1167.

 determination of β -hydroxybutyric acid in liver and muscles, A., 1281.

Snapper, J., Grünbaum, A., and Neberg, J., function of the kidneys in the breakdown of β -hydroxybutyric acid, A., 127.

Snell, F. R. See Hammick, D. L.

Snelling, W. O., manufacture of carbon black, (P.), B., 889.

Snelling, W. O., and Trojan Powder Co., explosive, (P.), B., 723.

Snettlage, H. S. J. F., determination of flour in sausages, B., 963.

Snider, G. G. See Hoagland, R.

Snider, H. J., and Hein, M. A., nitrogen and dry matter content of sweet clover tops and roots at various stages of growth, A., 1066.

Snoddy, A. O., detection and determination of small amounts of chromium in fats, B., 285.

Snoddy, A. O. See also Richardson, A. S.

Snoddy, L. B. See Brackett, F. S.

Snodgrass, W. R. See Campbell, D.

Snoek, J. L., and Bouma, T., intensity distribution in the fine-structure of the cadmium triplet $2p_1-2s$, A., 986.

Snoek, J. L., *intensity distribution in the fine structure (satellites) of the mercury triplets* $2p_1-2s$, A., 329.

Snyder, H., and Sullivan, B., determination of moisture in wheat and flour, B., 351.

Snyder, J. E. See Brown, F. E.

Snyder-Welch Process Corporation, coloured patent leather and the process of making the same, (P.), B., 1022*.

Sobek, E. (discharging device for continuously operating shaft furnaces, (P.), B., 616*.

Sobotka, H., oxidation of methylated glucoses, A., 1026.

Sobotka, H. See also Elek, A., Levere, P. A., and Willstätter, R.

Sochestvenskaja, E. See Dodonov, J.

Société des Acieries et Forges de Firmont, decarbonisation of metals, especially iron and steel, (P.), B., 162.

Société l'Air Liquide. See L'Air Liquide.

Société Alsacienne de Constructions Mécaniques. See Weintraub, E.

Société Alsacienne de Prodnts Chimiques, bleaching agent, (P.), B., 153.

Société Anonyme A.L.F.A. Appliquez Lavorazioni Fibra Alfa e affini, treating textile fibres, such as esparto grass, alfa, and similar vegetable substances, (P.), B., 1009.

Société Anonyme Alumine et Dérivés. See Patrouilleau, L. G.

Société Anonyme des anciens Établissements Egrot et Grangé, purification of coke-oven gas, (P.), B., 262.

Société Anonyme le Carbone, positive electrodes for electric batteries, (P.), B., 446.

 [depolariser for] dry batteries or batteries with a solidified electrolyte, (P.), B., 550.

 lead accumulators, (P.), B., 591.

Société Anonyme le Carbone. See also Oppenheim, R., and Street, E. A. G.

Société Anonyme des Ciments Français, Bureau d'Organisation Economique, and Bled, J., manufacture of fused cement, (P.), B., 159.

Société Anonyme de Commentary, Fourchambault & Decazeville. See Girin, P.

Société Anonyme des Établissements J. F. Audibert, treatment of seed of the carob-tree or other plant to extract the gum, (P.), B., 642.

Société Anonyme d'Exploitation des Brevets "Cousin" dite "Le Chanilage Industriel," air-blast device for semi-water-gas producers, (P.), B., 778.

Société Anonyme pour l'Exploitation des Procédés Maurice Leblanc-Vickers. See Leblanc, C. L. A. M.

Société Anonyme Hydrocarbures et Dérivés, treatment of low-temperature tar from lignite, (P.), B., 264.

 production of motor fuel, (P.), B., 733.

Société Anonyme Ind. des Matières Grasses et Savons "Velos." See Konstas, A. S.

Société Anonyme des Manufactures des Glaçes et Produits Chimiques de St. Gobain, Chauny, & Cie, lining glass, (P.), B., 824.

 apparatus for the manufacture of sheet glass, (P.), B., 1015*.

Société Anonyme des Matières Colorantes et Prodnts Chimiques de St. Denis. See Wahl, A. R.

Société Anonyme des Mines et Fonderies de Zinc de la Vieille-Montagne, desulphurization of zinc ores, (P.), B., 711*.

Société Anonyme d'Ourgeat-Maribaray, distillation and fractional condensation of complex mixtures such as mixed hydrocarbons, (P.), B., 309, 473*.

Société Anonyme le Salvoxy, process for producing oxygen, either pure or mixed with other fluids, (P.), B., 744.

Société pour l'Application Industrielle des Brevets Peufaillit. See Thellier, H.

Société de Chimie et de la Catalyse Ind. Siegle Social. See Blanchet, L.

Société Chimique des Usines du Rhône, preliminary treatment of cellulose prior to esterification, (P.), B., 49*.

 increasing wetting power of spray mixtures for plants, (P.), B., 103.

acetylation of cellulose, (P.), B., 483*.

preparation of ethylidene diacetate, (P.), B., 692.

purification of cellulose ethers, (P.), B., 739.

Société Chimique des Usines du Rhône. See also Altwegg, J., Eidaud, F., Goisset, P. E., Grillet, N. B., and Roy, G. J.

Société des Condenseurs Delas, regulation of evaporating, concentrating, and distilling apparatus, (P.), B., 647.

method for making solid substances crystallise out of their solutions, (P.), B., 650*.

apparatus for evaporating, distilling, or concentrating liquid, (P.), B., 968.

Société d'Electro-Chimie, d'Electro-Métallurgie, et des Acieries Électriques d'Uginc, production of pure alkali metals, (P.), B., 792.

recovery of tin from ores, residues, and the like, (P.), B., 885.

Société d'Electro-Métallurgie de Dives. See Société de Recherches et de Perfectionnements Ind.

Société des Établissements Barbet, fertiliser and glycerin from vinasses, (P.), B., 893.

Société d'Étude des Agglomérés, purification of zirconium ores, (P.), B., 18.

Société d'Étude des Agglomérés. See also Lo Coutre, F. C. F.

Société d'Études Chimiques pour l'Industrie. See Breslauer, J.

Société d'Études et de Constructions Métallurgiques, extraction of hydrogen from gaseous mixtures, (P.), B., 407.

Société d'Études Minières et Industrielles, manufacture of methane, (P.), B., 524.

manufacture of metallic nitrides in admixture with lithium nitride and amide, (P.), B., 1013.

Société d'Exploitation des Procédés d'Impression Sardou, chemical process for etching rubber for printing blocks, (P.), B., 205*.

Société d'Exploitation des Procédés Industriels Canalet, manufacture of cement, (P.), B., 409.

Société pour la Fabrication de la Soie "Rhodiaseta," manufacture of artificial silk and of artificial threads or filaments, (P.), B., 627*.

manufacture of artificial filaments [cellulose acetate], (P.), B., 915.

production of artificial yarns or threads, (P.), B., 975.

Société pour la Fabrication de la Soie "Rhodiaseta." See also Grillet, N. B., and Lehouze, J. E. G.

Société du Feutre. See Bourguignon, M.

Société du Film K.D.B. See Berthon, R.

Société de Fours à Coke et d'Entreprises Industrielles, ammonium sulphate saturator, (P.), B., 321.

Société Française des Crins Artificiels. See Delfaucamberge, J.

Société Française de Monnayage, silver alloy, (P.), B., 984.

Société Française des Produits Alimentaires Azotés, manufacture of food [and other] products from fish, (P.), B., 848.

nitrogenous extracts from albuminoid substances, (P.), B., 993.

Société Française des Produits Alimentaires Azotés. See also Kahn, M.

Société Française de Produits Aromatiques (anciens Établissements Gattefossé). See Gattefossé, R.

Société Générale d'Evaporation Procédé Prache & Bouillon, evaporating process and apparatus, (P.), B., 519.

Société Générale pour la Fabrication des Couleurs et Produits Chimiques, white pigment, (P.), B., 889.

Société Générale de Fours à Coke Systèmes Lecocq, coke ovens, (P.), B., 4.

Société Générale Métallurgique de Hoboken, recovery of zinc and lead from zinc-lead ores, (P.), B., 675.

Société "Lap," See Seailles, S., cement objects having polished and translucent surfaces, (P.), B., 441.

Société Lyonnaise des Eaux et de l'Eclairage. See Macaux, H.

Société Nationale d'Industrie Chimique en Belgique, S. A. See De Béthune, G.

Société l'Oxylique, manufacture of oxygen, (P.), B., 274.

Société des Procédés Métallurgiques Constant-Bruzac, manufacture of steel, (P.), B., 329.

smelting metals and ores, (P.), B., 549.

Société de Recherches et de Perfectionnements Industriels, purification of liquid fuels, in particular those containing alcohol, (P.), B., 147.

preparation of coal dust for the production of a coal of low ash in granular form, (P.), B., 572.

Société de Recherches et de Perfectionnements Industriels, and Société d'Electro-Métallurgie de Dives, manufacture of tin silicocloride, (P.), B., 876.

Société de Recherches et de Perfectionnements Industriels. See also Baume, G.

Société Verrières Folembray, resinous condensation products from phenols and formaldehyde, (P.), B., 955.

Society of Chemical Industry in Basle, manufacture of [triaryl]methane-azo-] dyestuffs containing chromium, (P.), B., 8*.

manufacture of [azo-] dyestuffs, (P.), B., 8*.

manufacture of new [azo-] dyestuffs, (P.), B., 43, 265.

manufacture of artificial shellac, (P.), B., 67.

manufacture of esters of unsaturated acids, (P.), B., 141.

manufacture of permanent [oil] emulsions, (P.), B., 200.

manufacture of resinous condensation products from phenols and sulphur, (P.), B., 203.

o-hydroxy-azo-dyes, (P.), B., 234.

preparation of azo-dyes, (P.), B., 234.

production of oil-gas, (P.), B., 309.

preparation of a heterocyclic compound of the naphthalene series, (P.), B., 312.

manufacture of diarylamines, (P.), B., 528.

manufacture of dyestuffs [containing zinc], (P.), B., 576.

manufacture of derivatives of condensation products of phenols containing sulphur, (P.), B., 596.

manufacture of dyestuffs capable of being chromed, (P.), B., 702.

manufacture of new [chromium compounds of azo-] dyestuffs, (P.), B., 702.

manufacture of derivatives [saturated or unsaturated dialkylamides] of pyridine-3-carboxylic acid, (P.), B., 720.

manufacture of a vat [anthraquinone] dyestuff, (P.), B., 735.

manufacture of 2 : 3-aminonaphthalene acid, (P.), B., 736.

manufacture of sulphur dyestuffs, (P.), B., 866.

preparation of 4-halogeno-1 : 8-naphthasultones, (P.), B., 870.

preparations of [vat-] dyestuffs, (P.), B., 1007.

manufacture of [azo-] dyestuffs [from barbituric acids], (P.), B., 910.

manufacture of [azo-] dyestuffs containing chromium, (P.), B., 910.

manufacture of [chromed azo-] dyestuffs, (P.), B., 910.

anthraquinone-2-glycine-3-carboxylic acid, (P.), B., 942.

manufacture of anthraquinone-thioxanthones and -acridones, (P.), B., 942.

manufacture of 2-mercaptoanthracene-3-carboxylic acid and anthracene-2-thioglycol-3-carboxylic acid, (P.), B., 942.

anthraquinonecarcidine dye, (P.), B., 943.

manufacture of anthracene-2 : 1-thioindoxyl, (P.), B., 943.

manufacture of 2 : 3-anthraquinonylindoxyl, (P.), B., 943.

Society of Chemical Industry in Basle, preparation of highly-purified physiologically active substances from female internal secretive organs, (P.), B., 965.

Society of Chemical Industry in Basle, and Blumfeldt, A., sulphur phenol resins, (P.), B., 681*.

Society of Chemical Industry in Basle, De Montmollin, G., and Bonhôte, G., azo-dyestuffs, (P.), B., 480*.

Society of Chemical Industry in Basle, De Montmollin, G., Reber, E., Bonhôte, G., and Spiller, J., 4-hydroxynaphthalene 1-aryl ketones, (P.), B., 8*.

Society of Chemical Industry in Basle, and Faust, E. S., injectable solutions of drugs insoluble in water, (P.), B., 511*.

Society of Chemical Industry in Basle, Fritzsche, H., Gubler, H., and Straub, F., acid azo-dyestuffs for wool containing chromium, (P.), B., 480*.

Society of Chemical Industry in Basle, Fritzsche, H., and Schädeli, P., aromatic derivative of cyanuric chloride, (P.), B., 122*.

Society of Chemical Industry in Basle, and Fröhlich, J., [vat] dyestuffs, (P.), B., 179.

Society of Chemical Industry in Basle, Haas, L., and Reber, E., bluish sulphurised indophenolbenzidine dye, (P.), B., 86*.

Society of Chemical Industry in Basle, Isler, M., and Michel, L. von, azo-dyestuffs containing chromium, (P.), B., 659*.

Society of Chemical Industry in Basle, Mayer, B., and Moser, W., indigo-dyestuff of the anthraquinone series and intermediate products, (P.), B., 122*.

Society of Chemical Industry in Basle, Mayer, B., and Würgler, J., indigo-dyestuffs, (P.), B., 480.

Society of Chemical Industry in Basle, and Minnich, W., preparation of solutions of medicaments insoluble or difficultly soluble in water, (P.), B., 311.

Society of Chemical Industry in Basle, and Moser, W., manufacture of 2 : 3-diaminoanthraquinone, (P.), B., 635.

Society of Chemical Industry in Basle, Retter, E., and Fröhlich, J., green sulphurised dyestuff, (P.), B., 266*.

Society of Chemical Industry in Basle, and Schetelig, P., condensation products [dyestuffs] of the anthraquinone series, (P.), B., 150*.

Society of Chemical Industry in Basle, and Staudinger, H., manufacture of derivatives of 4-hydroxypiperidines, (P.), B., 219*.

Society of Chemical Industry in Basle, Stiner, O., Hauswirth, A., and Gams, A., vitamin [malt] preparation, (P.), B., 297.

Society of Chemical Industry in Basle, Straub, F., and Schneider, H., [azo]dyestuffs containing metals, (P.), B., 659*.

azo-dyestuff containing zinc, (P.), B., 737*.

Society of Chemical Industry in Basle, and Sutter, T., separating potassium and sodium hydroxides, (P.), B., 53*.

Society of Chemical Industry in Basle. See also Isler, M., and Staudinger, H.

Söderblom, A. See Häggblom, E.

Söderlund, O., Boberg, T., Testrup, N., and Techno-Chemical Laboratories, Ltd., drying apparatus, (P.), B., 316*.

Söderlund, O., Gram, T., and Techno-Chemical Laboratories, Ltd., interchange of heat between liquids, (P.), B., 616.

Söhngen, N. L., and Coolhaas, C., fermentation of galactose by *Saccharomyces cerevisiae*, A., 1177.

Söhngen, N. L., and Wieringa, K. T., determinations of permeability with *Saccharomyces cerevisiae*, B., 978.

Soep, L., detection of saccharin in foods, B., 847.

detection of colouring matters in foods, B., 847.

Sogani, C. M., properties of chromatic emulsions, A., 336.

Sokolov, A., extraction of juices by diffusion, (P.), B., 642.

Sokolow-Wichnevsky, G., vacuum-producing apparatus; [water-jet gas ejector], (P.), B., 521*.

electric flux gas-testing apparatus, (P.), B., 624.

Solar Refining Co., treatment of petroleum oils, (P.), B., 863.

Solari, A. A., chemical composition of normal and leucic sera, A., 971*.

Solbach, R. See Sunder, C.

Solidifier Corporation. See Lukens, H. S.

Sollmann, T., and Howard, R. L., catalase activity of the oral mucous membrane, A., 1053.

Soloviev, B., multimicroclectrode for simultaneous determinations of μ , A., 374.

Soltész, G. See Kohn, M.

Solvay Process Co. See Cocksedge, H. E., Freeth, F. A., and Sundstrom, C.

Someya, K., use of liquid amalgams in volumetric analysis. III. Determination of phosphoric acid by using lead amalgam, A., 261*.

use of liquid amalgams in volumetric analysis. V. Determination of phosphoric acid by uranyl acetate, A., 702, 1116.

use of liquid amalgams in volumetric analysis. VI. Determination of chromic acid, ferric iron, and ferricyanide by means of titanous sulphate, A., 705, 1116.

use of liquid amalgams in volumetric analysis. IV. Reducing action of bismuth amalgam, reduction of uranium, and application of dichromate titration, A., 705, 1117.

determination of vanadium in presence of iron, A., 705.

determination of vanadium in ferrovanadium, B., 278.

Sommelet, M., preparation of tertiary amines derived from tertiary alcohols, A., 946.

Sommer, A., mortar for cement, (P.), B., 193.

Sommer, F., Groth, M., and Chemische Werke vorm. Auerges., producing enamels and glazes, (P.), B., 90*.

Sommer, H. See Waser, E.

Sommer, H. H., and Young, D. M., effect of milk salts on the whipping ability of ice-cream mixes, B., 847.

Sommer, L. A., Zeeman effect and the structure of the arc spectrum of ruthenium, A., 767.

Sommer, W. See Antropoff, W.

Sommerfeld, A., and Unsöld, A., spectrum of hydrogen, A., 549, 985.

Sommerfeld, A. See also Grimm, H. G.

Sommerfeld, R. von. See Ehrlich, F.

Sommermeyer, E. See Krollpfeiffer, F.

Somogyi, E. von, determination of small amounts of alcohol and ether vapours in the presence of each other, B., 419.

Sonne, M., manufacture of technical triacetin, (P.), B., 852.

Sonne, W., colourless material for increasing the adhesiveness of insecticides and fungicides, (P.), B., 893.

Sonnery, J., weighting, mordanting, and waterproofing animal and vegetable textile materials, (P.), B., 180.

Sontag, F. See Griebel, C.

Sooh, M. A. See Yajnik, N. A.
 Soós, A., method of determining the particle size of colloidal solutions, A., 575.
 Soper, F. G., and Smith, G. F., halogenation of phenols, A., 831.
 Sorge, O., liquid-cooling towers, (P.), B., 316*.
 Sorochovitch, S., enzyme content of the blood in experimental sympatheticotonia, A., 538.
 Sorokin, V., and Belikov, A., detection and determination of gaseous olefins. I. Action of olefins of chlorine dissolved in carbon tetrachloride, A., 267.
 Sosson, C. E. See Shoesmith, J. H.
 Soucek, B. See Heyrovský, J.
 Soucek, J., effect of increasing applications of sodium nitrate on sugar-beet, B., 893.
 Souder, H. S. See Jobson, W. P.
 Souder, W., and Hidner, P., thermal expansion of fused silica, B., 789.
 Soula, L. C. See Abelous, J. E.
 Soulo, R. P., and Combustion Utilities Corporation, extraction apparatus, (P.), B., 808.
 South Penn Oil Co. See Mossor, H. A.
 Southwestern Condenser Co. See Atchison, E. J.
 Souviron, P. J. F., production of red antimony sulphide pigments, (P.), B., 451.
 extraction of the manganese content of ochres, earths, and colours, (P.), B., 889.
 production of golden sulphide of antimony, (P.), B., 889.
 Sowerby, A. L. M., and Barratt, S., line absorption spectra of the alkali metals, A., 213.
 Sowers, N. E. See Knipp, C. T.
 Spach, E. See Girardin, R.
 Späte, R. See Hein, F.
 Späth, E., and Burger, G., alkaloids of the *Calumba* root. V. New base from the *Calumba* root and the constitution of berberubine and palmatubine, A., 963.
 Späth, E., and Kolbe, A., oxyacanthine, A., 82.
 Späth, E., and Mosettig, E., alkaloids of *Corydalis cava*; synthesis of *d*-tetrahydropalmitine, A., 965.
 Späth, E., and Quietensky, H., syntheses of oxyberberine, palmatine, and tetrahydrojatrorrhizine, A., 82.
 Späth, E., and Spitzer, H., chlorides of simple pyridine- and quinoline-carboxylic acids, A., 958.
 Späth, E., and Spitzky, W., synthesis of gallegine, A., 81.
 Spalding, S. C., effect of reheating on cold-drawn [steel] bars, B., 920.
 Spalding, W. L., and National Aniline & Chemical Co., benzidine flakes, (P.), B., 817.
 Spalton, A. H. See Kilby, J. N.
 Spangenberg, A. L., vapour pressure of ozone at very low temperatures, A., 560.
 Spanner, H. J. See Michel, G.
 Sparrow, S. W., and Eisinger, J. O., lubrication data from co-operative Fuel Research [U.S. Bureau of Standards], B., 619.
 Speak, S. J., occurrence of zinc silicate ore of supposed primary origin, A., 380.
 Speakman, H. B., physiological significance of deamination in relation to oxidation of dextrose, A., 1177.
 fermentation products from cellulose, B., 687, 902*.
 Speakman, H. B. See also Raper, H. S.
 Speakman, J. B., extension of wool fibres under constant stress, B., 943*.
 gel structure of the wool fibre, B., 943.
 Spear, E. B., and Goodyear Tire and Rubber Co., treating rubber, (P.), B., 69.
 Spear, E. B., and Moore, R. L., high and low stiffening carbon blacks [in rubber or oils], B., 452.
 Specht, F. See Blitz, W.
 Specht, H. See Lange, H.
 Specketer, H. See Chemische Fabrik Griesheim-Elektron, and I. G. Farbenind. A.-G.
 Specklin, P., films for instantaneous X-ray exposures, (P.), B., 300.
 Speid, J. B., Falk, A. H., and Western Electric Co., solder, (P.), B., 133.
 Speer, (Miss) N. E. See Kernot, J. C.
 Speight, E. A. See Kon, G. A. R.
 Speirs, C. W. See Morgan Crucible Co.
 Spek, J. van der. See Hissink, D. J.
 Spence, B. J. See Sandvik, O.
 Spence, H., Llewellyn, W. B., and Spence, P., & Sons, Ltd., treatment of aluminium materials, (P.), B., 320.
 Spence, L. V., and Cochran, P. B., utilisation of ozone in the drying of insulating varnishes, B., 888.
 Spence, P., & Sons, Ltd. See Craig, T. J. I., Lamb, M. C., and Spence, H.
 Spencer, G. C. See Morton, J. K.
 Spencer, H. McC., and Seydel Chemical Co., briquette, (P.), B., 812.
 Spencer, L. J., lead hydrogen arsenate as a mineral, A., 1022.
 Spencer, M. See Taylor, N. M.
 Spencer, R. C. See Mahin, E. G.
 Spencer, S. E., bottom grids for gas purifiers, (P.), B., 85*.
 Spencer Chapman & Messel, Ltd., and Liebert, J. B., manufacture and manipulation of colloidal or semi-colloidal substances, precipitates, or sediments and the recovery of the liquid or solid components, (P.), B., 439.
 Spencker, K. See Ohle, H.
 Spengler, O., coating cast-iron with lead, (P.), B., 1018.
 Spengler, O. See also Akt.-Ges. für Anilin-Fab., and L. G. Farbenind. A.-G.
 Spensley, J. W. See Chemical Engineering Co. (Manchester), Ltd.
 Sperl, H. See Weinland, R.
 Sperling, E. See Weissenberger, G.
 Sperling, M. See Ronia, P.
 Sperr, F. W., jun., and Koppers Co., coking process [for pitch], (P.), B., 81.
 removal of naphthalene and analogous hydrocarbons from fuel gases, (P.), B., 430.
 eliminating the sulphuretted hydrogen in fuel gas, (P.), B., 431*.
 manufacture of hydrogen sulphide, (P.), B., 410*.
 recovery of hydrogen sulphide, (P.), B., 410*.
 gas-purification apparatus, (P.), B., 701*.
 gas-purification process, (P.), B., 701*.
 Sperry, D. R., new method of conducting filtration tests, B., 343.
 Sperry, W. M., lipid excretion. III. Quantitative relationships of fecal lipins, A., 859.
 Speter, M., apparatus to determine different melting points at the same time, A., 378.

Speyer, E., and Popp, A., action of ozone on dihydrocodeine and ethyldihydro-morphine; fission of the morphine molecule, A., 532.
 Spicer, H. N., and Dorr Co., treatment of solid materials with liquid reagents; [preparation of aluminium sulphate from bauxite, etc.], (P.), B., 936.
 Spicer, H. N. See also Dorr Co.
 Spiegel, L., and Haymann, H., nitration of aromatic compounds with bismuth nitrate, A., 390.
 Spiegel-Adolf, M., alteration of albumin by heat, A., 352, 631.
 physical chemistry of globulins. VII. Effect of addition of salts to acid- and alkali globulin, A., 333.
 Spielder, J. See Society of Chemical Industry in Basle.
 Spielemann, P. E., earliest human knowledge of copper, A., 1021.
 Spierer, C., ultra-microscope, A., 931.
 Spiers, H. M. See Smith, E. W.
 Spilker, A., suitability of oils of high phenol content, especially low-temperature tar oils, for the operation of Diesel engines, B., 570.
 composition and chemical constitution of lubricants and their synthesis [from tar products], B., 365.
 Spilker, A., and Zerbe, K., chemical changes in the "berginisation" of coal, B., 939.
 Spilker, G. See Fricker, R.
 Spiritus-Presshefe & Chemische Fabrik Hamburger Kuhner Akt.-Ges., and Murrmann, H., treating timber for preventing subsequent shrinkage, (P.), B., 129.
 Spitaler, P. See Strecker, W.
 Spitalsky, E., kinetic laws of homogeneous catalysis, A., 1011.
 Spitzer, H. See Späth, E.
 Spitzley, R. L., Thompson, A. M., and Alloys Foundry Co., [non-oxidising iron-nickel] alloys, (P.), B., 673.
 Spitzky, W. See Späth, E.
 Splitterger, A., principles of modern specifications for boiler feed-water, B., 999.
 Splitterger, E. See Bennewitz, K.
 Speoehr, H. A., mechanism of photosynthesis and the internal factor, A., 1182.
 carbohydrate metabolism of leaves, A., 1182.
 Speoehr, H. A., and McGee, J. M., carbohydrate-amino-acid relation in the respiration of leaves, A., 1182.
 temperature coefficients and efficiency of photosynthesis, A., 1182.
 influence of various sugars on respiration, A., 1182.
 Speoehr, H. A., and Smith, J. H. C., atmospheric oxidation. I. Oxidation of dextrose and related substances in the presence of sodium ferroporphosphate, A., 335.
 Speoehr, H. A., and Wilbur, P. C., effect of disodium phosphate on dextrose and levulose, A., 1126.
 Speoehr, H. A. See also Smith, J. H. C.
 Sponer, H., excitation potentials of the band spectrum of nitrogen, A., 8.
 energy levels of the nitric oxide molecule, A., 110.
 absorption bands in nitrogen, A., 1192.
 Sponer, H. See also Birge, R. T.
 Sponsel, K. See Farbw. vorm. Meister, Lucius, & Brüning.
 Sponsler, O. L., molecular structure of plant fibres determined by X-rays, A., 760.
 Spoon, W., native rubber, (P.), B., 681.
 Spoon, W. See also De Vries, O.
 Spooner, T., temperature coefficient of magnetic permeability of sheet steel, A., 461.
 Sporer, F. See Erben, F. X.
 Spray Engineering Co. See Preble, J. J.
 Sprungluft Gas.m.b.H., preparation of liquid-air blasting cartridges for use in presence of coal dust and firedamp, (P.), B., 388.
 Sprungluftswerke R. Nähnsen & Co., Akt.-Ges. and Pyl, G., production of primers, (P.), B., 613.
 Sprent, W. C. See Dodd, H.
 Springer, L., separation of metals from glass melts, B., 947.
 Springer, R. See Zinke, A.
 Spröngerts, E. See Kalle & Co. A.-G.
 Spreeser, W. C., and Westinghouse Lamp Co., control of the softening temperature of vitreous material, (P.), B., 192.
 Spruth, H. C. See Nielsen, C.
 Spuhmann, E. See Zielstorff, W.
 Spun Concrete Construction Co., Ltd. See Melandri, J.
 Spurr, J. F., alkali sulphides as collectors of metals, A., 494.
 Spurrell, W. R. See Poulton, E. P.
 Spurrier, H., treating ceramic mixtures, (P.), B., 55, 489*.
 Spurway, C. H., and Austin, R. H., residual effects of neutral salt treatments on the soil reaction, B., 457.
 Spyer, A. See Babcock and Wilcox, Ltd.
 Srinivasan, N. G. See Ramanathan, K. R.
 Staatl. Porzellan-Manufaktur. See König, A.
 Stacey, F., flour bleaching gas, (P.), B., 339.
 Stach, E., examination of claraein or antrachrylon in coal, B., 569.
 Stack, J. R., and American Smelting and Refining Co., recovering tin from ercs, (P.), B., 163.
 Stackelberg, M., ion, influence of the "inner electronic structure" of atoms on the ionic radius, A., 221.
 Stadie, W. C., Austin, J. H., and Robinson, H. W., effect of temperature on acid-base-protein equilibrium and on carbon dioxide absorption curve of whole blood, true and separated serum, A., 422.
 Stadie, W. C., and Ross, E. C., micro-determination of base in blood and biological materials, A., 100.
 oxygen, acid-, and base-combining properties of blood. II. Preparation of crystalline isoelectric haemoglobin, A., 854.
 Stadie, W. C. See also Austin, J. H.
 Stadler, F. See Abel, E.
 Stadler, O. See Schläpfer, P.
 Stadler, R., phosphorescence excitation by means of moderately rapid cathode rays, A., 993.
 Stadlhuber, M. See Siemens & Halske A.-G.
 Stadnikov, G. L., Gavrilov, N., and Rakovski, V., desulphurising cresols and the acid fractions from various coal tars, B., 353.
 elimination of sulphur impurities from technical cresols and petroleums, B., 575.
 Stadnikov, G. L., Gavrilov, N., and Vinogradov, A., reduction of organic compounds containing oxygen by active carbon, A., 60.
 reduction of cresols, B., 148.
 Stadnikov, G. L., and Ivanovski, E., catalytic transformation of fatty acids into hydrocarbons, A., 1110; B., 306.

Stadnikov, G. L., and Proskurnina, N., definition of the terms coal, lignite, and peat, B., 729.

Stadnikov, G. L., and Weizmann, A., abnormal course of Grignard reactions, A., 512.

Stählein, F., permanent magnets, B., 57.

Stäger, H., insulating oils, B., 331.

Staeger, H. C., methods of testing transformer oils, B., 117.

Staemmler, M. See Handovsky, H.

Stafford, W. E., alkali [rubber] reclaiming process, B., 167.

Stagner, B. A. See Frizzell, D. R.

Stahl, W., copper containing bismuth, B., 161.
recovery of selenium from lead chamber slimes, B., 537.

Staltschmidt, F. A. E., imparting various colours to brass articles, (P.), B., 952.

Stahn, R. See Tranre, W.

Staidl, J. A. See J. D.

Staiger, volumetric determination of phosphoric acid in yeast, A., 212.

Stallings, J. H., form of legume nitrogen assimilated by non-legumes when grown in association, B., 601.

Stanion-Dobrzański, J., colour of crushed alkaline-earth sulphur phosphors, A., 1080.

Starni, A. J., and Kraemer, E. O., mechanism of emulsification, A., 792.

Stamm, H. See Stolle, R.

Stamm, W., liberation of free phosphoric acid from surviving brain pulp and the influence of drugs, A., 431.

Stammers, J. D., relative sensitivity of the benzidine and phenolphthalein tests for blood, A., 854.
determination of sugar in blood, A., 1067.

Stammreich, H. See Miethe, A.

Stanczak, W. See Lederer, O.

Standard Chemical Co. See Goetschins, D. M., and Vogt, L. F.

Standard Development Co. See Baldeschwieler, E. L., Becker, A. E., Clark, E. M., Hopkins, M. B., Howard, F. A., Johns, C. O., Messenger, O. U., Rudigier, E. A., and Weit, H. M.

Standard Oil Co., Rogers, F. M., Paulus, M. G., and Humphreys, R. E., production of low-boiling hydrocarbons, (P.), B., 733.

Standard Oil Co. See also Chappell, M. L., Danner, P. S., Faber, J. F., Gates, L. G., Glair, H. F., Halloran, R. A., Hanna, R. W., Humphreys, R. E., King, K. V., Rogers, F. M., Sweeny, P. J., Wendt, G. L., Wiles, R., and Wilson, R. E.

Standard Oil Co. of New York. See Rether, J. B.

Standard Silk Dyeing Co. See Seyer, J.

Standardath, F., anti-enzymes. I. Anti-trypsin, A., 1276.
anti-enzymes. II. Tissue and serum proteases (peptidases), A., 1276.

Standier, H. J., and Radelet, A. H., blood chemistry in eclampsia, A., 1271.

Stanek, V., and Vondrák, J., rapid method for determining the loss of polarisation in beet analysis, B., 509.
coloration of beet juices during evaporation, B., 961.

Stanescu, P. P., diurnal quantitative variations in carbohydrates of leaves of green plants, A., 430.

Stange, B., light-sensitive layers, (P.), B., 421.

Stanley, R. C. See International Nickel Co.

Stanfield, J., chemical characters of okaita, A., 708.

Stapleton, P., and Strond, E., apparatus for dyeing and otherwise treating textiles, textile fabrics, etc., (P.), B., 317.

Starck, F. See Plücker, W.

Starck, H. C., Kommanditges. auf Aktien, Klaus, F., and Basler, R., manufacture of chromium sulphate solution free from iron from ferrochrome, (P.), B., 192.
production of chromate solutions practically free from iron, (P.), B., 739.
production of chrome alum from solutions of ferrochromium, (P.), B., 876.

Stark, A. See Weinland, R.

Stark, D. D. See Sayers, R. R.

Stark, J., regular relation between chemical elements with respect to the effect of an electric field on series lines, A., 103.

Starke, A., Wartenberg, H. von, and Ozonhochfrequenz G.m.b.H., process for producing ozone, (P.), B., 413*.

Starkweather, H. W. See Baxter, G. P.

Starling, W. W. See Dudley, H. W.

Starlinger, W., weight analysis of the protein groups of human blood plasma and salt plasma, A., 442.
membrane hydrolysis of neutral sodium caseinogenate, A., 631.

Starlinger, W., and Hartl, K., relative viscosity of proteins of human blood-ecrum and their determination, A., 86.
determination of proteins in human blood-ecrum. I., II., and III., A., 211.

Starý, Z., elementary composition of hair, A., 194.

Stas, M. E., determination of dissolved oxygen in water in presence of nitrile, B., 110.

Stasiak, A., stability towards acid of the oxytocic principle of the infundibulum, A., 980.

Statham, N., and West Virginia Pulp and Paper Co., dry-distillation apparatus [for calcium acetate], (P.), B., 182.

Stäther, F. See Bergmann, M.

Staub, T., removal of gases from molten aluminium, (P.), B., 97.

Staudinger, H., warning against the customary method of preparing cooling mixtures with combustible compounds and liquid air, A., 378.
production of hydrogenated caoutchouc, (P.), B., 23.

chemistry of rubber and gutta-percha; isoprene and caoutchouc. X., B., 239.
manufacture of an ester of 4-hydroxy-*N*-allyl-2:6-dimethylpiperidine, (P.), B., 897.

Staudinger, H., and Bruson, H. A., highly polymerised compounds. VII. Di-cyclopentadiene and other polymeric cyclopentadienes. VIII. Polymerisation (catalysed) of cyclopentadiene, A., 719.

Staudinger, H., and Geiger, E., isoprene and caoutchouc. X. Behaviour of caoutchouc on heating, A., 841.

Staudinger, H., Tobler, R., Stocker, R., Müller, J., Bucher, A., and Society of Chemical Industry in Baden, halogenated indigo dyestuffs, (P.), B., 1007*.

Staudinger, H., and Widmer, W., isoprene and caoutchouc. IX. Formation of cyclocaoutchouc from caoutchouc hydrogen halides, A., 810.

Staudinger, H. See also Bruson, H. A., and Society of Chemical Industry in Baden.

Staudt, E., corrosion of copper pipe by kerosene, B., 3.

Staudt, W. See Kossel, A.

Staub, W., viscometry, A., 112.

Stauffer, M. See Lindner, J.

Stavorinus, D., determination of free sulphur in spent gas-purifying material, B., 906.

Steacie, E. W. R., and Johnson, F. M. G., solubility and rate of solution of oxygen in silver, A., 1089.

Stead, J. C. See Golding, J.

Steadman, B. K., increasing the suspension of [paper] coating mixture by the addition of colloids, B., 552.

Stearns, G. See Daniels, A. L.

Stebbins, A. H., crusher, (P.), B., 568.

Stebbins Engineering & Manufacturing Co. See Babcock, F. J.

Steché, T., nomenclature in Werner's theory of inorganic complexes, A., 227.

Stedman, E., chemical constitution and physiological action. I. Position isomerism in relation to the miotic activity of some synthetic urethanes, A., 974.

Stedman, E., and Stedman, (Mrs.) E., haemocyanin. II. Influence of hydrogen-ion concentration on the dissociation curve of the oxyhaemocyanin from the blood of the common lobster (*Homarus vulgaris*). III. Influence of hydrogen-ion concentration on the dissociation curve of the oxyhaemocyanin from the blood of the edible crab (*Cancer pagurus*), A., 1161.

Stedman, (Mrs.) E. See Stedman, E.

Stedman, H. L., and Mendel, L. B., effects of radiations from quartz mercury-vapour arc on some properties of proteins, A., 966.

Steensbergh, A. W. See Mackenzie, H. J.

Steenbock, H., Hart, E. B., Hoppe, C. A., and Black, A., fat-soluble vitamin. XXVI. Effect of irradiation on antirachitic properties of milk, A., 437.

Steenbock, H. See Hart, E. B.

Steenhauer, A. J. See Itallie, L. van.

Steenstrup, C., and General Electric Co., closed furnace and method of operating it, (P.), B., 224*.

Steere, F. W., [water-g]as manufacture, (P.), B., 351.
gas producer or generator, (P.), B., 972.

Steere, G. R., and Eberlein, J. B., water-gas manufacture, (P.), B., 778.

Steffen, C., jun., processes for obtaining tricalcium saccharate, (P.), B., 928.

Steffenburg, S. See Euler, H. von.

Steffens, J. A., and United States Industrial Alcohol Co., obtaining absolute propyl alcohol, (P.), B., 299.
obtaining absolute alcohol, (P.), B., 613*.

Steffens, W., determination of iodine in drinking water, B., 902.

Stegeman, G. See Rosenburg, J. E.

Stegemann, W. See Dieterle, H.

Seiger, W. See Endell, K.

Stehmann, H., device for burning cement, magnesite, lime, etc., (P.), B., 489*.

Steib, H., *dl*- α -methylarginine, A., 824.
 α -amino- ϵ -guanido- α -hexoic acids, A., 825.

Steigmann, A., colloidal aurous oxide; gold toning of photographic papers A., 923.
determination of silver in photographic emulsions, B., 387.

Steigmann, A. See also Kögel, G.

Steigmann, A. See Fischer, W. M.

Stell, E. See Autogen Gasaccumulator A.-G.

Stein, B. See Schmidt, R. E.

Stein, F., manufacture of alkali sulphates and glaserite, (P.), B., 788.

Stein, H., Austin, W. E., Liebowitz, I., and Stein Fur Dyeing Co., bleached and dyed furs, (P.), B., 189, 318.

Stein, H. See also Boehringer & Söhne G.m.b.H., C. F.

Stein, L. See Ebert, J., and Mannich, C.

Stein, T., and General Electric Co., device for measuring flue-gas losses, (P.), B., 777.

Stein, V. See Chem. Fabr. Norgine, H.

Stein Fur Dyeing Co. See Stein, H.

Steinbrücker, H. See Walther, R. von.

Steinbrückner, A. See Maschinenbau-Anstalt Dampfkesselfabrik. A.-G. Darmstadt, vorm. Venuleth & Ellenberger, Göhrig & Leuchs.

Steindorf, A. See Farby vorm. Meister, Lucius, & Brüning.

Steinel, P. See Lange, F.

Steiner, A. See Ostwald, W.

Steiner, W. See Bouhoeffer, K. F.

Steinert, J., peat briquettes, (P.), B., 308.

Steingrover, A. See Pringsheim, H.

Steinkopf, W., and Höpner, T., phenolic constituents of producer gas tar from Bohemian lignite, B., 624.

Steinkopf, W., and Müller, P. J., diazotisability of aminothiophens, A., 956.

Steinkopf, W., and Ohse, W., thiophen series. XIX. Thiophen-cuaine-A and some other thiophen derivatives, A., 1044.

Steinkopf, W., Roch, J., and Schultz, K., compounds of iodoform with quaternary salts, A., 829.

Steinle, J. V., and Kahlenberg, L., identification and determination of cholesterol and other compounds, A., 633.

Steinmann, A., and Deuss, J. J. B., application of disinfectants used in the cultivation of rubber, B., 681.

Steinmann, W., working up slaughterhouse offal, animal carcasses, and fish, (P.), B., 818.

Steinruck, A. See Plücker, W.

Steinrück, K. See Rheinische Kampfer-Fabrik. G.m.b.H.

Steinschneider, L., high-vacuum distillation of mineral oils, B., 259.

Steinschneider, M. See Akt.-Ges. für Zellstoff- & Papier-Fabrik.

Steinwehr, H. von. See Jaeger, W.

Stelfox, J. C. See Humphreys & Glasgow.

Stella, G., reciprocal protective effect of colloidal magnesium, calcium, strontium, and barium carbonates, A., 1201.

Stelling, H., fireproofing organic fibrous material; [preparation of filtering material, catalyst carriers, etc.], (P.), B., 858.

Stenbuck, F. A. See Ottenberg, R.

Stenger, L. A. See Shafer, R. W.

Stenström, W., and Reinhard, M. C., influence of p_{H} on the ultra-violet absorption spectra of certain cyclic compounds, A., 10.
ultra-violet absorption spectra of blood-serum and certain amino-acids, A., 422.
preparation of colloidal lead, A., 1017.

Steopoe, A., oxidation of organic substances by copper oxide, A., 595.
preparation of colloidal manganese dioxide by the reduction of potassium permanganate solution with organic reducing gases. I. Reduction with ethylene, A., 676.

colloidal manganese dioxide, A., 792.

structure of the carboxyl group, A., 834.

Stepanov, D. V., electrolytic preparation of boronate, B., 786.

Stepanov, D. V., stability of bleaching powder, B., 786.
 Stephan, K., removing printers' ink from old paper, B., 400.
 Stephen, H. W., and Wilson, F. J., thiazole derivatives. I., A., 1262.
 Stephens, C. V., See Vautin, C. T. J.
 Stephens, H. N., oxidation in the benzene series by gaseous oxygen. I. Oxidation of methylbenzenes, A., 1028.
 Stephens, T. See Meister, W. F.
 Stephenson, A., and Allen-Liversidge, Ltd., treating residue from the manufacture of acetylene for the recovery of lime products, (P.), B., 979.
 manufacture of lime, (P.), B., 1013.
 Stephenson, B. R., and Cork, J. M., K-series emission spectra for the elements from tantalum (73) to bismuth (83), A., 446.
 Stephenson, B. R. See also Cork, J. M.
 Stephenson, G. E. See Briscoe, H. V. A.
 Stephenson, J., coke-ovens, (P.), B., 940.
 Stephenson, M. See Coombs, H. T., and Quastel, J. H.
 Stephenson, R. E., relation of fineness of grinding to rate of sulphur oxidation in soils, B., 762.
 Steppuhn, O., Peweiner, G., and Timofejeva, A., autolysis. VI. Autoproteolysis of entire animal bodies under various conditions, A., 1174.
 Steppuhn, O., and Timofejeva, A., autolysis. IV. Effect of iodine on autolysis. V. Effect of iodine on autolysis *in vivo*, A., 976.
 Sternchi, M. See Kehrmann, F.
 Sterkers, E., and Bredeau, R., reactions between solid substances reduced to the colloidal state, A., 792.
 Sternkin, E., effect of calcium and potassium ions on the blood-sugar, A., 968.
 Sterling, J. R., apparatus for treating the vapours arising from plants for drying wet organic matter, (P.), B., 111.
 Stern, A. See Fischer, Hans, and Fraenkel, W.
 Stern, E., micrography of oil and varnish films, B., 638, 796.
 Stern, E., and Becher, H., new yeast preparation, B., 382.
 Stern, F., and Zellner, J., comparative plant chemistry. XI. *Sonchus arvensis*, L., A., 646.
 Stern, F. See also Bergmann, M.
 Stern, H. S., improved salt bridge, A., 130.
 Stern, H. T., colorimetric p_{H_2} test of water or unbuffered solutions, A., 38.
 Stern, M., recovery of nickel or nickel-iron alloys from nickeliferous rolling-mill scale and similar residues, (P.), B., 330.
 Stern, O., transformation of atoms into radiation, A., 585*.
 Stern, R., colloid-chemical experiments on cholesterol, A., 576.
 Stern, R., and Suchantke, G., significance of cholesterol in bile and serum. III. The equilibrium between cholesterol and its esters in disordered liver function, A., 1064.
 Sternberg, A., process for treating blood, (P.), B., 335.
 Sternberg, M., detection of bilirubin, A., 752.
 Stern-Rainer, L., properties of gold-silver-copper alloys, A., 666.
 Sternkopf, C. J., production of [mechanical] wood-pulp, (P.), B., 10*.
 Steffach, A., analysis of burnt chalk and magnesite after storage in air, B., 918.
 production, properties, and investigation of burnt magnesite, B., 977.
 Stettiner Chamotte-Fabrik Akt.-Ges. vorm. Didier, production of combustible gases from finely-divided or high-ash fuels, (P.), B., 309.
 Steudel, H., partial decomposition of thymus-nucleic acid, A., 853.
 Steudel, H., Ellinghaus, J., and Goitschalk, A., peptic hydrolysis. I. and II., A., 866.
 Steudel, H. See also Ellinghaus, J., and Mandel, J. A.
 Steuer, W., determination of hydrogen and methane in illuminating gas, B., 3.
 determination of paraffin hydrocarbons, B., 522.
 Steuer, W. See also Neumann, B.
 Steur, J. P. K. van der. See Bertram, S. H.
 Stevens, A., separating butyl alcohol and water, (P.), B., 300*.
 Stevens, D. R., Marley, N. P., Gruse, W. A., and Gulf Refining Co., improving motor fuel, (P.), B., 779.
 Stevens, F. W., rate of flame propagation in gaseous explosive reactions, A., 913.
 Stevens, G. H., vulcanising rubber, (P.), B., 23.
 Stevens, H. P., coagulation [of rubber latex] with sodium silicofluoride in conjunction with *p*-nitrophenol, B., 68.
 significance of the protein film [around rubber globules], B., 100.
 factors influencing plasticity of sole crêpe [rubber], B., 167.
 coagulation and mould prevention of smoked sheet rubber, B., 288.
 crêpe rubber prepared with different reagents, B., 333.
 utilisation of clotted latex for making sheet [rubber], B., 415.
 bulk test with *p*-nitrophenol [as mould-preventive for rubber], B., 551.
 natural ageing test [of vulcanised rubber], B., 761.
 unsmoked sheet rubber prepared with dinitro-o-cresol, B., 1021.
 comparison of smoked sheet rubber prepared with *p*-nitrophenol by the coagulating and soaking processes, B., 1021*.
 Stevens, J. L., concentration of ores, (P.), B., 833.
 Stevens, J. W., value of litmus, bromocresol-purple, and Janus-green milk in a study of the nodule organisms of *Leguminosae*, A., 647.
 Stevens, T. S. See Haworth, R. D.
 Stevenson, E. P., and Little, A. D., Co., Inc., extracting turpentine, pine oil, and resin [colophony], (P.), B., 924.
 Stevenson, F. M. See Ellis, G. H.
 Stevenson, P., and Stevenson, P. jun., hydrometers, (P.), B., 1000*.
 Stevenson, P. jun. See Stevenson, P.
 Stewart, A. W. See McVicker, W. H.
 Stewart, C. P., metabolism of arginine and histidine. II. Arginine and histidine as precursors of purines, A., 198.
 Stewart, C. P. See also Barger, G., and Percival, G. H.
 Stewart, D. McG., [visual indicator of flow of water through] pressure filters, (P.), B., 614*.
 Stewart, J. See Woodman, H. E.
 Stewart, J. K., and Shell Co. of California, decolorising, purifying, and adsorbent composition, (P.), B., 808.
 Stewart, J. Q., generalisations of the Rayleigh formula for molecular scattering, A., 226.
 Stewart, L. See Pease, R. N.
 Stewart, T. D., and Aston, J. G., base strength of α -alkoxyamines; effect of oxygen on the basicity of amines, A., 824.
 Stewart, T. D., and Fowler, R. D., rate of the reaction between ethylene and chlorine, A., 690.
 Steyer, H. See Schmidt, Ferdinand.

Stiasny, E., and Szegö, L., chrome tanning. III. Tanning effect of some complex chromium compounds, B., 376.
 Stich, C., viscosity measurements by means of Mohr's balance, A., 41.
 Stickings, R. W. E., and May & Baker, Ltd., preparation of soluble salts of substituted phenylarsenite acids, (P.), B., 615.
 manufacture of organic compounds of bismuth for therapeutic purposes, (P.), B., 996.
 Stickstoffwerke G.m.b.H., Franck, H., and Heimann, H., manufacture of hydrocyanic acid or cyanides [from calcium cyanamide], (P.), B., 125.
 Stieff, W. C. See Homstegger, S. E.
 Stiehr, G., gas apparatus, B., 967.
 Stipek, C., fat from spent [hydrogenation] catalyst, B., 247.
 bleaching action of 60% and 35% hydrogen peroxide on saponifiable oils and fats, B., 758.
 Stig, F. E. L. See Stig, T. G.
 Stig, T. G., and Stig, F. E. L., production of alloyed steel and iron with chromium, manganese, etc., (P.), B., 246*.
 Stiles, A. G., and Felsing, W. A., heat of solution of sulphur dioxide, A., 800.
 Stiles, L. S., manufacture of illuminating gas, (P.), B., 5.
 water-gas apparatus, (P.), B., 5.
 Still, C., distillation of crude ammoniacal liquor in a column apparatus, (P.), B., 438.
 Stillwell, F. E., nature of berthierite, A., 1119.
 Stilson, H. H., and Stilson Process Corporation, apparatus for refining petroleum, (P.), B., 352.
 Stilson Process Corporation. See Stilson, H. H.
 Stimson, R. W., manufacture of [steel] alloys, (P.), B., 367.
 Stimson, R. W., and Borchers, W., manufacture of alloys [containing silicon, titanium, or zirconium], (P.), B., 367.
 Stiner, O. See Society of Chemical Industry in Basle.
 Stinnes-Riebeck Montan- & Oelwerke Akt.-Ges., H., refining mineral oils, (P.), B., 263.
 tanning animal hides, (P.), B., 761.
 Stintzing, H., possible significance of tetrahedra numbers in the natural system for atomic mass and atomic structure, A., 7.
 Stitt, R. R., refrigerant, (P.), B., 221.
 Stitt, R. R. See also Stitt Refrigeration Co.
 Stitt Refrigeration Co., and Stitt, R. R., refrigerating systems, (P.), B., 776*.
 Stobbe, H., chemical isomerism of the three *cis*-cinnamic acids, A., 166.
 photochemistry of some derivatives of cinnamic acid, A., 287.
 Stobbe, H., and Hensel, A., truxillic and truxinic ketones. I. Polymerides of phenyl *p*-methoxystyryl ketone and other chalcones, A., 1248.
 Stobbe, H., and Lehnfeld, A., polymerisation and depolymerisation by light of different wave-lengths. II. α - and β -*trans*-Cinnamic acid, *allo*cinnamic acid, and their dimers, A., 64.
 Stobbe, H., Ljungren, G., and Freyberg, J., parallel between diphenylfulgide and dibenzoylenedihydroglycolic anhydride, A., 403.
 Stock, A., danger of mercury vapour, A., 707.
 silicon hydrides [and derivatives], A., 924.
 boron hydrides. XI. Constitutional formulae of boron hydrides, A., 1218.
 Stock, A., and Heller, R., determination of small quantities of mercury, A., 703.
 Stock, A., and Polland, E., colorimetric determination of very small quantities of mercury, A., 814.
 boron hydrides. VIII. B_2H_4 and $B_2H_{11}B_2H_5I$. IX. $B_2N_3H_4$. X. B_4H_4I ; synthesis of B_1I_{16} , A., 1217.
 Stock, A., and Ritter, G., determination of gas density with the density balance. I. Efficiency and construction of different balances, A., 669.
 Stock, E., usefulness of the iodine value by Margosches' method in the examination of oils, B., 20.
 capillary-analysis and its application to the examination of resins, B., 679.
 utility of the Storch-Jłorawski [Liebermann] reaction in the testing of paints and varnishes, B., 888.
 Stockdale, D., allotropy of zinc, A., 117.
 α -phase boundary in the copper-tin system, A., 314*; B., 328*.
 copper-rich aluminium-copper-tin alloys, B., 279, 792*.
 Stockdale, D., and Wilkinson, I., properties of modified aluminium-silicon alloys, B., 830.
 Stockelbach, F. E., and Mathieson Alkali Works, manufacturing benzoic acid from benzotrichloride, (P.), B., 851.
 Stockenschneider, W. See Posner, T.
 Stocker, A. See Brandwood, J.
 Stocker, R. See Staudinger, H.
 Stockholders' Syndicate. See Blumenberg, H., jun.
 Stockholms Superfosfat Fabr. Aktiebolaget, and Ramsay, H. G. A., production of alkali cyanides, (P.), B., 273.
 Stöhr, R. See Schmidt, Z.
 Stoermer, R., and Fretwurst, F., γ -truxillic acid. XI. A., 291.
 Stoermer, R., and Lachmann, H., configuration of β -truxinic acid. XII. A., 613.
 Stoermer, R., Neumaerker, J., and Schmidt, R., configuration and degradation of ϵ -truxilic acid. X. A., 290.
 Stoermer, R., Thier, C., and Laage, E., constitution of the so-called diphenyl-cyclobutane, A., 160.
 Stözel, F., manure from sewage and other substances, (P.), B., 302.
 Stöwener, F. See I. G. Farbenind. A.-G.
 Stoffella, C. G., determination of sugar in urine, A., 764.
 Stoïs, A. See Eibner, A.
 Stokes, F. W. See Kirkham, Hnlett, & Chandler, Ltd.
 Stokes, J., jun. See Kahn, G.
 Stokes, J. S., synthetic resin composition, (P.), B., 137.
 Stokes, R. O., tanks for treatment of liquids or solids mixed with liquids, (P.), B., 346*.
 Stokes, W. E., and United States Processes Co., Inc., treating vanadium ores and solutions, (P.), B., 915.
 Stoklasa, J., effect of radioactivity on energy exchanges and metabolism of animal and plant cells, A., 91.
 aluminium in organic life, A., 547.
 physiological function of iodine in synthetic and working metabolism of cells poor and rich in chlorophyll, A., 1182.
 Stoll, B. V., refining oil, (P.), B., 780.
 Stoll, L., action of "vulkone"; reversion [of rubber during vulcanisation], B., 101.
 influence of diphenylguanidine on the mechanical properties of vulcanised rubber, B., 988.
 Stoll, M. See Ruzicka, L.

Stoll, W. See Curtius, T.
 Stolle, R., constitution of osotetrazines and amino-osotriazole, A., 1158.
 Stolle, R., and Schick, E., preparation of aminotetrazole, (P.), B., 566.
 Stolle, R., and Stamm, H., condensation of coumarandiones with coumaranones, A., 1253.
 Stollenwerk, W., solubility of monocalcium phosphate in water, A., 1090.
 Stoller, P., dependence of the form of the flame in a combustion flue on various factors, B., 521.
 Stoltzenberg, H., production of additive compounds of hydrocyanic acid and metal chlorides, (P.), B., 683.
 Stolz, F. See Farbw. vorm. Meister, Lucius, & Brüning.
 Stone, H. G. See Klipstein, E. C., & Sons Co.
 Stone, J. F. S. See Perkin, W. H., jun.
 Stone, S. B. See Harkins, W. D.
 Stoner, E. C., X-ray term values, absorption limits, and critical potentials, A., 773.
 atomic moments of ferromagnetics, A., 1180.
 Stoneware, Ltd., and Dean, H., [brick] kilns, (P.), B., 362.
 Stoney, G. G., and Boswall, R. O., viscosimeters, (P.), B., 2.
 Storch, H. H. See Gauger, A. W.
 Story, Le R. G. See Bennett, H. T.
 Stott, O., [centrifugal] apparatus for separating or expelling solid impurities from air, combustion gases, etc., (P.), B., 904*.
 Stott, V. H., Turner, D., and Sloman, H. A., effects of thermal treatment on glass as shown by precise viscosimetry, B., 946.
 Stotz, P. See Meisenheimer, J.
 Stoughton, B., and Billinger, R. D., spheroidising of cementite, B., 826.
 Stoughton, B., and Duck, F. J. G., dendritic structure and crystal formation [in steel], B., 919.
 Stout, H. H., treatment of metallurgical slag, (P.), B., 18.
 Strachan, C. B., and Strachan Tube Mill Co., pulverising mill, (P.), B., 520.
 Strachan, C. B. See also Strachan Tube Mill Co.
 Strachan Tube Mill Co., and Strachan, C. B., pulverising mill, (P.), B., 904*.
 Strachan Tube Mill Co. See also Strachan, C. B.
 Strache, H., increasing the calorific value of combustible gases by the decomposition of tar vapours, B., 859.
 Strache, H., and Mika, C., influence of temperature on the coke yield in crucible tests, B., 225.
 Strache, H., and Polcich, G., carbonisation of wood, (P.), B., 732.
 Strack, O. See Pfälzische Chamotte & Thonwerke (Schiffer & Kircher) A.-G.
 Straight, H. R., dryer kiln [for ceramic ware], (P.), B., 362.
 continuous kiln, (P.), B., 363.
 Strange, E. H., manufacture of alcohols and acetone [by fermentation], (P.), B., 604.
 Stranck, I.-N. See Günther, P.
 Strasser, E., casting aluminium and aluminium alloys and moulds for use therin, (P.), B., 517.
 Strassmann, G., and Fanti, adipocere, A., 752.
 Straits, R. See Gastaldi, C.
 Straub, F. See Society of Chemical Industry in Basle.
 Straub, F. G. See Parr, S. W.
 Straub, H., and Gollwitzer-Meier, K., transmineralisation in poisoning by mercuric chloride, A., 200.
 Straub, J., determination of the size and charge of colloidal particles by means of Dounan's membrane equilibrium, A., 902.
 freezing point of milk from diseased cows, B., 765.
 Straub, W., astringent action of aluminium acetate, A., 1267.
 insecticide for moths, (P.), B., 188.
 Straub, W. See also Gädé, W.
 Straumann, M. See Centnerszwer, M.
 Straus, F., and Demus, H., isomeric forms of didiphenylcarbinol, A., 1241.
 Straus, F., and Kolker, L., diacetylethene, A., 1120.
 Straus, F., and Voss, W., propionic acid and propiolic anhydride, A., 1121.
 Straus, H. P., apparatus for fractionation of petroleum, (P.), B., 41*.
 Straus, B., and Krupp, F., Akt.-Ges., steel alloy, (P.), B., 635*.
 Straus, E. See Bauer, H.
 Straus, H., higher hydrolytic products of proteins in the blood; residual nitrogen, A., 753.
 Strebinger, R., micro-burner, A., 492.
 Strebinger, R., and Mandl, J., microchemical determination of strontium, A., 492.
 Strebinger, R., and Pollak, J., use of pyrophosphates in micro-analysis; [determination of manganese, zinc, and cobalt], A., 492.
 Strebinger, R., and Wojs, A., volumetric determination of acetylene, B., 971.
 Strecker, W., and Daniel, W., [hydrides of bismuth and tin], A., 1113.
 Strecker, W., and De la Peña, P., determination of thallium, A., 262.
 Strecker, W., and Diaz, F. O., determination of rubidium and caesium, A., 261.
 Strecker, W., and Ebert, W., tellurium nitride, A., 137.
 Strecker, W., and Spitaler, F., determination of the constitution of inorganic substances by spectroscopic methods, A., 1082.
 Street, E. A. G., and Société Anonyme Le Carbone, impermeabilising substances for absorbing gas [for use in electric batteries], (P.), B., 66*.
 Streeter, H. W., rate of atmospheric re-aeration of sewage-polluted streams, B., 725.
 water purification studies by U.S.A. Public Health Service, B., 966.
 Streeter, L. R. See Thatcher, R. W.
 Streitwolf, K. See Farbw. vorm. Meister, Lucius, & Brüning, and L. G. Farbenind. A.-G.
 Strickhouser, S. I. See Buswell, A. M.
 Strickler, E., means for eradication of animal and plant pests, (P.), B., 559.
 Strobel, A., and Scharrer, K., influence of potassium chloride on germination of rye, wheat, barley, and oats, A., 1066.
 Strobel, A. See also Niklas, H.
 Stroder, E. See Farbenfabr. vorm. F. Bayer & Co.
 Ströder, P. See Auwers, K. von.
 Stroganov, S. N., present state of the treatment of sewage by means of activated sludge, B., 617.
 Strommenger, A. P. See Quasi-Arc Co., Ltd.
 Strommenger, L. See I. G. Farbenind. A.-G.
 Strong, R. A., report of carbonisation and washing experiments on sub-bituminous coal from Coal Valley, Alberta, B., 697.
 Strong, W. E. S., Parsons, C. E., Peacock, S., and Metal Research Corporation, making metallic chromium, (P.), B., 513.
 Stress, W. See Langecker, H.
 Stroud, E. See Stapleton, P.
 Strub, J., spectrophotometric investigation of colouring matters of blood, A., 776.
 Struben, A. M. A., treatment [distillation] of carbonaceous materials, (P.), B., 523.
 Strzegier, S., and Weber, F., catabolism of starch in mesophyll and guard cells, A., 99.
 Strum, L., stability of the atomic nucleus, A., 656.
 Strumpf, F., rapid determination of silica and lime in the raw mixture for blast-furnace cement, B., 408.
 Struwe, F., critical voltages of radon, A., 552, 876.
 Struyk, A. P. See Kluyver, A. J.
 Stscherbakov, I., mercury cathodes in electrolytic oxidation processes, A., 248.
 Stscherbakov, I., and Essin, O., electrolysis of sodium chromate with a mercury cathode, B., 712.
 Stuart, A. T., Middleton, G. N., and Clark, F. G., apparatus for decomposition and recombination of hydrocarbons, (P.), B., 622.
 Stutts, J. R., sweet potato starch in cornflour and arrowroot, B., 800.
 Studebaker Corporation. See Lee, I. H., and Woodside, W. P.
 Studien-Ges. für Ausbau der Industrie. See Ehrenberg, C.
 Stückgold, M. See Jablonski, K.
 Stücklein, H., line and band absorption of copper and its fine-structure lines, A., 1.
 Stuer, B. See Rhenania Verein Chem. Fabr. A.-G.
 Stüsser, R. See Farbenfabr. vorm. F. Bayer & Co.
 Stuhlmann, O., jun., excitation of the O-energy levels in tungsten by electron bombardment, A., 331.
 excitation of the M-series in iron by electronic impact, A., 1072.
 Stuhlmann, H. See Auwers, K. von.
 Stull, A. See Bogert, M. T.
 Stull, R. T., and Stull Process Co., ceramic material, (P.), B., 513.
 Stull Process Co. See Stull, R. T.
 Stump, H. E. See Loomis, C. C.
 Stumpen, H., dependence of intensity of X-ray spectral lines on the voltage of excitation, A., 447.
 Stumper, R., solubility of calcium carbonate, A., 466.
 determination of the quality of a concrete, B., 153.
 fire-bars and their behaviour in the fire, B., 255.
 Sturgeon, R. A., centrifugal separating machines, (P.), B., 936.
 Sturm, A. See Veil, W. H.
 Sturtevant Co., B. F. See Galloway, G. A., and Redman, K.
 Stutz, G. F. A., testing of paint pigments for transparency to ultra-violet radiation, B., 759.
 Stutz, G. F. A., Nelson, H. A., and Schmutz, F. S., evolution of hydrogen peroxide by oils on exposure to light, B., 20.
 Subbarow, Y. See Fiske, C. H.
 Suchy, J. E. See Wood, C. E.
 Suchantke, G. See Stern, R.
 Sucharda, E., preparation of quinolinic acid and certain of its derivatives, A., 301*.
 synthesis of 8-pyridindigotin, A., 307*.
 Sucharda, E. See also Plazek, E.
 Sucharipa, R., vitamin content of plant juices, B., 330.
 Suchy, R. See Chem. Fabr. Griesheim-Elektron.
 Sucksmith, W., magnetic susceptibilities of some alkali metals, A., 782.
 Sucksmith, W., and Potter, H. H., specific heat of ferromagnetic substances, A., 893.
 magnetic properties of single crystals of nickel, A., 1196.
 Sudan, A. C. See Dragstedt, I. R.
 Sudborough, J. J., Watson, H. E., and Ayyar, P. R., [with Damle, N. R., Masareshan, V. M., and Mirchandani, T. J.], vegetable oils containing glycerides of crucic acid, B., 951.
 Sudborough, J. J. See also Patel, C. K.
 Sufield & Co., and Gelbke, M., winning of technically valuable products from the alkaline waste products resulting on refining mineral, tar, and shale oils, (P.), B., 526.
 Süddeutsche Telefon-Apparate-, Kabel-, & Drahtwerke Akt.-Ges., iron hydride resistances for regulating electric currents, (P.), B., 135.
 Sussiern, E. S., generation of gas, (P.), B., 621.
 Sudgen, J. N., hydration of strong electrolytes, the viscosity of their aqueous solutions, and the dilution law, A., 211.
 Sudgen, (Miss) R., system ammonium acetate-acetic acid-water, A., 683.
 Sudgen, S., arrangement of molecules on the surface of pure liquids, A., 1094.
 Sudgen, S., and Wilkins, H., parachor and chemical constitution. III. Orientation isomerism in aromatic compounds, A., 157.
 Sudgen, S., and Williams, M., protective colloids. I. Influence of concentration, A., 1099.
 Sugie, J., ray-transmission of glass. I. Transparency to ultra-violet rays of alkali-lime glasses, and manufacture of glasses which transmit ultra-violet rays, B., 54.
 Sugihara, N. See Wohlgemuth, J.
 Sugira, Y., spectrum of ionised lithium, A., 101.
 Sugira, Y. See also Nagaoka, H.
 Suhrmann, R., and Clusius, K., production of thin Wollaston wires, A., 261.
 preparation of pure alkali metals, A., 589.
 Suida, H., working up of tar, (P.), B., 310.
 extraction process [for concentration of acetic acid], (P.), B., 421.
 Suida, H. See also Chem. Fabr. vorm. Weller-ter Meer.
 Suizu, K., and Yokozawa, N., mechanism of the rearrangement of diazoaminobenzene into aminoazobenzene. I. Some salts of diazoaminobenzene, A., 831.
 Sullivan, B. See Snyder, H.
 Sullivan, J. T. See Kraybill, H. R.
 Sullivan, M. X., test for cysteine, A., 1266.
 Sullivan, R. E., and Lukens, H. S., electrolytic method for the determination of zinc in zinc ores, B., 16.
 Sullivan, R. W. See Holmes, H. N.
 Sulman, H. L. See Scott, A. C.
 Sulzberger, N., asbestos paper, etc., (P.), B., 504.
 Sulzer, A. F., and Eastman Kodak Co., manufacturing cellulose acetate, (P.), B., 48.
 Sumblin, W. H., bearings for centrifugal extractors, (P.), B., 937*.
 Summers, B. S., manufacture of paper pulp from vegetable fibres, (P.), B., 153.
 making paper for paper, (P.), B., 534*.
 paper pulp and paper, (P.), B., 913*.

Summers, F., common faults in cotton goods, B., 150.

Summers, L. L., artificial fuel, (P.), B., 395.

Summer, J. B., is cyanic acid an intermediate product of the action of urease on carbamide? A., 758.

isolation and crystallisation of urease, A., 1061.

recrystallisation of urease, A., 1176.

Sun Oil Co. See Hughes, E. M.

Sundberg, R. See Benedicks, C.

Sundell, F. R. A., manufacturing artificial stone, (P.), B., 981.

Sunder, C., [production of] serop effects on cotton, B., 86.

Sunder, C., and Solbach, R., [printing] coloured discharges on indigo grounds by means of vat dyes, B., 402.

Sunder, C. See also Durand & Huguenin S.A.

Sunderman, F. R. See Van de Water, F. C.

Sunderman, F. W. See Austin, J. G.

Sundius, A. H. R., lead alloy, especially for cable covering, (P.), B., 833.

Sundling, J. L. E., preparing raw peat to make it suitable for pressing, (P.), B., 731.

Sundstrom, C., Terziev, G. N., and Solvay Process Co., process of forming sodium carbonate, (P.), B., 488*.

process of forming sodium compounds, (P.), B., 630.

Supan, A. See Oberschlesische Kokswerke & Chem. Fabr. A.-G.

Supniewski, J. V., aryl bismuth derivatives, A., 906.

toxicological properties of certain thiocarbamine compounds, A., 1173.

influence of insulin on acetaldehyde formation in the animal organism, A., 1179.

Supniewski, J. V., and Adams, R., organic bismuth compounds. I. Preparation of tricarboxytriphenylbismuth dichlorides and certain nitrotriaryl bismuth compounds, A., 419.

Supniewski, J. V. See also Collazo, J.

Sur, N. K., fundamental level of the iron atom, A., 329.

water-spark absorption spectrum of iron, A., 331.

arc spectrum of lead, A., 386.

Sur, N. K., and Majumdar, K., absorption spectra of aluminium and cobalt, A., 334.

Sur, R. See Saha, M.

Sur, R. K., selective radiation pressure and the accelerated motion of Ca^+ vapour in eruptive prominences, A., 991.

Sur, R. K. See also Saha, M.

Surányi, L., and Körényi, A., determination of cholesterol, A., 100.

Sur, E., dietary requirements for reproduction. V. Role of vegetable and fruit oil in fertility and lactation. VI. Types of sterility produced on a reproduction-deficient diet. VII. Lactation-promoting factor in unsaponifiable matter from wheat oil, A., 981.

Surface Combustion Co., method and apparatus for controlling combustion, (P.), B., 621*.

Suran, M., adsorptive power of charcoals, A., 1001.

Suran, P., adsorption of some organic acids by two active carbons of different origin, A., 788.

Suray, J., photographic pigmentary printing paper, (P.), B., 220*.

Susskind, terpineol content of turpentine obtained in the production of terpin hydrate, B., 963.

Sussmann, S. See Kohn, M.

Suski, U., and Mori, T., sulphur-containing sugar obtained by hydrolysis of adenylythiosugar, A., 96.

Suzuki, J. See Dziewiński, K.

Sutcliffe, E. R., manufacture of fuel, (P.), B., 428.

Sutcliffe, E. R., and Pure Coal Briquettes, Ltd., apparatus for distillation of carbonaceous substances, (P.), B., 627*.

Suter, E. See Chemical Works (formerly Sandoz).

Sutra, R. See Hasenfratz, V.

Sutter, T. See Society of Chemical Industry in Basle.

Sutton, H. See Bengough, G. D.

Sutton, H. W. See Trotman, S. R.

Sutton, T. C., nature of the "critical increment" of chemical action, A., 480.

Sutton, T. C., and Ambler, H. R., abnormal absorption of gases by steel, B., 1016.

Suzuki, E., and General Electric Co., electrodeposition of metallic chromium, (P.), B., 1019.

Suzuki, T., and Sakurai, S., new acid and its salts strongly absorbing ultra-violet rays, (P.), B., 76.

Suzuki, T. See also Sameshima, J.

Suzuki, U., chemical studies of vitamin-B in Japan, A., 980.

Suzuki, U., and Hashimoto, N., influence of cholesterol on the reproductive potency of white rats, A., 863.

Suzuki, U., Matsuyama, Y., and Hashimoto, N., relative nutritive value of various proteins contained in Japanese food articles, B., 418.

Svart, E., use of white enamels containing antimony compounds [in the preparation of enamelled-iron cooking utensils], B., 192.

Svanberg, O., constitution of diacetonegalactose [galactose diisopropylidene ether], A., 714.

Svedberg, A. See Folin, O.

Svedberg, T., determination of mol. wts. by centrifuging, A., 677.

Svedberg, T., and Fahraeus, R., determination of the molecular weight of proteins, A., 310.

Svedberg, T., and Tiselius, A., determination of the mobility of proteins, A., 1104.

Svensson, K. J., and Norling, K. A. P., means for reducing air currents in centrifugal machines, (P.), B., 521*.

Swain, J. G., and Firestone Steel Products Co., electroplating, (P.), B., 163.

Swallow, J. C. See Crommellin, C. A.

Swan, E., deliquescent properties of magnesium chloride, of calcium chloride, and of glycerol, B., 978.

absorption of water by dried films of boiled starch. II. Absorption and desorption between 20° and 90°, B., 992.

Swan, J. C., separating condensable [hydrocarbon] vapours from gases, (P.), B., 182.

Swanger, W. H., analysis of dental gold alloys, B., 1017.

Swann, H. See British Dyestuffs Corp., Ltd.

Swanson, C. O., [flour] ash; determination and significance, B., 605.

Swanson, W. W. See Fahr, G. F.

Swart, E. See Smits, A.

Swartz, H. A., graphitisation at constant temperature, B., 981.

Swartz, O. See Euler, H. von.

Swasey, S. L. See Richter, G. A.

Sweeney, H. C. See Weather, A. T.

Sweeny, B. T., practical chemical control of [enamel] pickling-room solutions, B., 917.

Sweeney, M. A. See Walker, E. L.

Sweeney, O. R., base-exchange water softener, (P.), B., 518*.

Sweeney, O. R., and Ward-Love Pump Corporation, base-exchange water softener, (P.), B., 110.

Sweeney, W. T. See Hidner, P.

Sweeny, P. J., and Standard Oil Co., conversion of high-boiling hydrocarbon oils into lower-boiling oils, (P.), B., 700.

Sweet, S. S. See Sheppard, S. E.

Sweitzer, C. W., light scattering of salt solutions, A., 15.

Swenson Evaporator Co., vacuum evaporating apparatus, (P.), B., 304.

Swientoslawski, W., heat of combustion of standard substances, A., 116.

chemical valency in the light of contemporary theories, A., 662.

Swift, R. See McGivern, W. J.

Swift, R. W. See Forbes, E. B.

Swift & Co., cheese; emulsification and pasteurisation of cheese; pasteurising cheese, (P.), B., 383*.

Swift & Co. See also Jones, K. K., and Richardson, W. D.

Swindells, F. E. See Harned, H. S.

Swingle, W. W., and Werner, W. F., prevention and cure of tetany by oral administration of strontium, A., 318.

Swinnerton, A. A., distillation of oil shale, B., 697.

Swinnerton, A. A. See also Gilmore, R. E.

Swint, W. R., and Du Pont de Nemours & Co., E. I., dynamite composition, (P.), B., 551.

Swirles, (Miss) B., polarisabilities of atomic cores, A., 1191.

Swiss Jewel Co. See Bertolini, D.

Swjaginsev. See Zvjaginsev.

Swoboda, J., machinery lubricating oils, B., 349.

Swoboda, K., and Horny, R., determination of cerium in special steels, B., 242.

Sword, J., constitution of oxidation products obtained by the action of chromyl chloride on terpenes, as deduced from a new interpretation of the reaction, A., 841.

Sword, J. See also Gibson, D. T.

Symon, F. J., diffusion of salt vapours in a Bunsen flame, A., 464.

Symons, E., crushing discs, (P.), B., 3*, gyratory [line] crushing process and apparatus, (P.), B., 111.

Symons, E. B., and Symons Bros. Co., gyratory cone crusher, (P.), B., 775.

Symons Bros. Co. See Symons, E. B.

Syniewski, V., diastase, II. Does α -diastase act like β -diastase? III. Velocity of starch hydrolysis by α -diastase, A., 93, 201*.

Synthetic Ammonia & Nitrates, Ltd., and Bramwell, F. H., catalytic apparatus for the synthesis of ammonia, (P.), B., 12.

heat interchanges for carrying out catalytic gas reactions [ammonia synthesis], (P.), B., 405.

high-pressure joints, (P.), B., 472.

catalytic processes and apparatus for reactions between gases [synthesis of ammonia], (P.), B., 788.

Synthetic Ammonia & Nitrates, Ltd., and Coxon, T., production of solid compounds of ammonia, carbon dioxide, and water, (P.), B., 979.

Synthetic Ammonia & Nitrates, Ltd., and Humphrey, H. A., carrying out exothermic gaseous catalytic reactions [especially the synthesis of ammonia], (P.), B., 821.

Synthetic Ammonia & Nitrates, Ltd., and Schultze, W., catalytic production of hydrogen, (P.), B., 13.

Synthetic Ammonia & Nitrates, Ltd., and Slade, R. E., carrying out exothermic gaseous catalytic reactions [especially the synthesis of ammonia], (P.), B., 822.

Synthetic Ammonia & Nitrates, Ltd. See also Humphrey, H. A.

Syracuse Pulverizer Corporation, and Briggs, A. J., pulverisers, (P.), B., 999.

Syrkin, J. K., [radiation] theory of the velocity of chemical reactions, A., 1009.

Syrkin, J. K., and Bernstein, L. I., sorption kinetics, A., 681.

Szabo, R., velocity of hydrolysis of acid anhydrides in aqueous solutions of electrolytes and non-electrolytes, A., 1010.

Szamatolski, H., and Blohm, A., separating solid and liquid constituents from gases and vapours, (P.), B., 648.

Szamatolski, J., development of the aromatic chemical industry from 1876 to 1926, B., 350*.

Szarvay, I., thermal decomposition of gaseous hydrocarbons, natural gas, etc., by heat, (P.), B., 908.

Szegö, L. See Stiasny, E.

Szegvári, A. See Klein, P.

Székely, T., condensation of phenol ethers with carbimols, A., 285.

Szél, K., rotation entropy of di- and poly-atomic gases, A., 570.

Szent-Györgyi, A. von, cell respiration. IV. Oxidation mechanism of potato, A., 99.

mechanism of the action of Schardinger's enzyme, A., 867.

Szep, E. See Belak, A.

Szepessy, C. See Bodnár, J.

Szilárd, G., combustion, gasification, or degasification of pulverulent fuels, (P.), B., 572, 621.

Szilárd, A., relative positions of the absorption bands of a pigment dissolved in various colourless solvents, A., 557.

Szilárd, L. See Mark, H.

Szilárd, P., colorimetric determination of bile salts in blood, A., 872.

Szivessy, G., Born's dipole theory of anisotropic liquids, A., 888.

Szokov, P. G. See Tschitschibabin, A. E.

Ézper, L., and Wydryzki, S., action of sulphur on organic compounds. VII. Aromatic aldehydes, A., 952.

Szücs, J., preparation of citric acid by fermentation, (P.), B., 642.

Szukiewicz, W. See Kopaczewski, W.

Szymankiewicz, S. See Zawadzki, J.

T.

Tabata, K., and Moriyasu, S., production of pure zirconia from semi-refined zirconia, B., 1011.

Tabern, D. L. See Dennis, L. M., Gomberg, M., and Lanbengayer, A. N.

Tachi, I. See Shikata, M.

Tacke, B., [seed] stimulation, B., 208.

Tacke, B., and Arnd, T., acidity of moist soils. I. Determination of total acidity by the Tacke-Schlichting method, B., 1024.

Tacke, (Frl.) I., discovery of eka-manganese elements. I., A., 112.

Tada, S. See Kita, G.

Tadokoro, T., Nakamura, Y., and Watanabe, S., differences in the physico-chemical properties of the protein, oryzanin, as found in glutinous and in common rice, A., 1066.

Täglich, W. See Becher, E.

Täufel, K., relation between chemical constitution and taste of sweet substances, A., 430.

Täufel, K., and Klemm, B., natural and artificial sweetening materials. I. Degree of sweetness of saccharin and dulcific, B., 106.

Täufel, K., and Naton, J., hydrolysis of α -benzoic sulphinic ("saccharin"), A., 518.

Täufel, K., and Sarria, J. G., composition of olive oil, B., 332.

Täufel, K., and Wagner, C., alkalimetric determination of formaldehyde by means of sodium sulphite, A., 533.

Tafel, W., manufacture of deoxidised iron or steel, (P.), B., 162. deoxidation of ingot iron and steel, (P.), B., 164*. treating ingot iron, (P.), B., 832.

Tagliani, G., "immunisation" of vegetable fibres and their use in dyed and printed materials, B., 872.

Tainter, M. L. See Hanzlik, P. J.

Taipale, K. A., catalytic hydrogenation of azines. III. Hydrogenation of diisobutyridineazine, A., 157.

Tait, A., and Fletcher, L., development and nutrition of yeast. III., B., 929.

Tait, A. See also Ford, J. S.

Tait, W. H. See Pinkerton, A.

Tajime, R., tensile strength of tungsten wires at high temperatures, B., 365.

Takada, R., growth-stimulating action of yeast extract for *Saccharomyces sake*, A., 1276.

Takahashi, E., and Itagaki, T., proteins of the adzuki bean (*Adzukia subtrilobata*), A., 1066.

Takahashi, G., equilibrium between austenite and the carbon oxides, B., 670.

Takahashi, K., adrenaline content of the suprarenal gland [of the rabbit], A., 857.

Takahashi, T., exhaustive oxidation of 2-methylpyrrolidine by chromic acid, A., 1235.

Takahashi, T. See also Karrer, P.

Takamatsu, T., precipitation of ferric hydroxide sol by different electrolytes, A., 472.

Takamine, T., intensity of the forbidden mercury line 2270 Å, A., 767. spectroscopic study of the discharge in helium, A., 985.

Takane, S., supposed hydrolysis of starch by salts and protein degradation products, A., 1059.

Takana, R., respiration and carbohydrate exchange of animal tissue. II. Respiration and carbohydrate exchange in the liver and muscle of warm-blooded animals, A., 754.

Takao, T., intermediary fat metabolism. I. Effect of a fat diet on carbohydrate metabolism. II. Influence of ions on formation and excretion of acetone substances, A., 973.

Takayama, Y., separating and collecting organic acids and bases from beetroot molasses, (P.), B., 800*.

Taketomi, N., production of alcohol from rice straw, B., 508.

Takeuchi, R. See Chikashige, M.

Talbot, B., metallurgical furnaces, (P.), B., 246*. lining and coating pipes and other bodies, (P.), B., 837.

Tallada, F., anodes for production of organic acids, (P.), B., 985.

Talwar, R. C. See Yajnik, N. A.

Tama, M., present position of the electric furnace for the melting of non-ferrous metals, B., 161.

Tamamushi, B., effects of gases on the surface tensions of some liquids, A., 1093. derivation of adsorption isotherms, A., 1201.

Tamar, K., mechanical properties of titanium steel, B., 515. hardness of different structures in steel, B., 881.

Tambor, J., Plattner, G., and Zäck, C., 2-hydroxy- α -naphthyl methyl ketone, A., 733.

Tammann, G., distribution of two atom-types in mixed crystals, A., 459. chemical reactions between solids at high temperatures, A., 921.

Tammann, G., [with Westerhold, F., Gare, B., Kordes, E., and Kalsing, H.], chemical reactions in powdered mixtures of two kinds of crystals, A., 131.

Tammann, G., and Bätz, G., m.p. curve of arsenious oxide, A., 1087. production of iron from silicates and pyrites, B., 277.

Tammann, G., and Diekmann, H., effect of pressure on the potential of the hydrogen electrode, A., 360.

Tammann, G., and Hesse, W., dependence of viscosity on temperature in super-cooled liquids, A., 1198.

Tammann, G., and Kollmann, K., determination of gold dissolved in mercury, A., 377.

Tammann, G., and Meyer, H. H., changes in the crystal orientation of copper during recrystallisation, A., 783.

Tammann, G., and Müller, A., determination of the orientation of the crystallites in metallic conglomerates, A., 459.

Tammann, G., and Rienäcker, W., precipitation of radium-F from solutions on silver, copper, gold, copper-gold, and silver-gold alloys, A., 1190. rate of tarnishing of copper-gold alloys in oxygen, carbon dioxide containing hydrogen sulphide, and in air containing iodine, B., 1017.

Tammann, G., and Rosenthal, W., formation of normal uranates by heating uranium trioxide with metal oxides, A., 1114.

Tammann, G., and Runge, F., dependence of the potential of the oxygen electrode on pressure, A., 1104.

Tammann, G., and Siebel, G., spectrometrical measurement of the increase of thickness of surface films [on metals], A., 573.

Tammann, G., and Veszi, G., electrical conductivity of salts as single crystals and as crystal conglomerates, A., 461.

Tanaka, S., arrangement of micro-crystals in rolled platinum plate, A., 112.

Tanaka, S. See also Murayama, Y.

Tanaka, T. See Honda, K.

Tanaka, Y., and Nagai, S., naphthenic acids. VI. Naphthenic acids derived from Nishiyama petroleum, B., 37.

naphthenic acids from gas oil distillate of Californian petroleum, B., 307.

naphthenic acids derived from kerosene distillate of Californian petroleum, B., 476.

Tanaka, Y., and Nagai, S., naphthenic acids. XI. Naphthenic acids derived from petroleum before acid treatment, B., 653.

Tanaka, Y., and Nagai, Y., spontaneous ignition temperatures of inflammable liquids and the effect of water on them, A., 1087.

inflammability of hydrogen. I. Influence of ethyl bromide on the limits of inflammability of hydrogen-air mixtures. II. Influence of organic bromine and iodine compounds on the upper limit of inflammability of hydrogen-air mixtures, A., 1106.

effect of anti-knock materials on spontaneous ignition temperatures of some inflammable liquids, B., 906.

Tanaseev, N. A., state of ferric salts in solution, A., 240.

application of the reaction between ferric salts and iodides to the determination of ferrous and ferric iron, A., 263.

action of oxalic acid on alkali chlorides and nitrates, A., 694.

systematic qualitative analysis of cations by the spot method, A., 927.

Tanaseev, N. A., and Fantschenko, G. A., detection of titanium and uranium by spot analysis, A., 377, 930.

Tanasescu, H. See Tamasescu, I.

Tamasescu, I., mechanism of the photochemical reactions of α -nitrobenzaldehyde and some of its condensation products, A., 1247.

Tamasescu, I., and Tamasescu, H., photochemical reactions of derivatives of α -nitrobenzylidenecetacel, A., 726.

Tancov, N. V., crystallisation of supersaturated solutions of sodium sulphate and carbonate, A., 788.

Tangi, H., variations in loosely-bound carbon dioxide of the blood, A., 968.

Tangi, H. See also Farkas, G.

Tankard, A. R., filtration method of measuring sediment in milk, B., 171.

Tanner, H. G., identification of "norit" and other wood charcoals, B., 35.

Tanner, H. G., and Lasselle, P. A., preparation and properties of α -toluidine, A., 1030.

Tanner, W. L., and Grasselli Chemical Co., manufacture of diphenylamine-chloroarsine, (P.), B., 76.

process of making arsenates of manganese, (P.), B., 743.

Tanners Product Co. See Gallagher, A. H.

Taplin, B. See Moulden, J. C.

Tapsell, H. J., and Bradley, J., mechanical properties at high temperatures of an alloy of nickel and copper with especial reference to "creep," B., 280, 792*.

Taradoire, F., rapid oxidation of drying oils; effect of anti-oxidising agents, B., 135, 921.

Tarasov, B., and Rudenko, V., formolite values of Grozny petroleum, B., 1003.

Tartar, H. V., and Draves, C. Z., precipitation of mastic suspensoids, A., 794.

Tartar, H. V., and Perkins, M. F., nitrogen fixation in the high-tension arc, B., 485.

Tartar, H. V. See also Draves, C. Z.

Tarugi, N., thiocyanates and cellular respiration, A., 190, 1170.

ferro- and ferri-cyanides, A., 259.

Tashiro, K., urea-nitrogen concentration of the blood. I. Physiological variations of the blood urea-nitrogen and the influence of fixation and anaesthesia on it. II. Effect of caffeine, A., 856.

Taskar, E. E., means for removing moisture from pulp, paper, straw boards, etc., (P.), B., 913*.

Tate, J. T., absorption of 2510 Å. by mercury vapour, A., 107.

Tateyama, R., sugar catabolism in the human placenta, A., 90.

enzymes of the human mammary gland, A., 93.

Tateyama, R. See also Abderhalden, E.

Tattersall, H. J. See McKenzie, A.

Tatu, H. See Seyewetz, A.

Tatum, W. W. See Badiley, J.

Taub, L., Janssen, H., Wesenberg, G., and Winthrop Chemical Co., silver-protein preparation, (P.), B., 515*.

Taub, L. See also Farbenfabr. vorm. F. Bayer & Co., and Ursum, W.

Taube, C. See Fischer, H. O. L.

Taubenhaus, M. See Adlersberg, D.

Taussig, I. See Knbelka, V.

Taussig, R. See Zellstoff-fab. Waldhof.

Tausz, J., and Rumm, H., rapid determination of water content [in cereals, etc.], B., 338.

Taveau, R. de M., and Texas Co., purification of crude alcohols [from oil gas], (P.), B., 1006.

Tavernari, M. G., industrial preparation of sodium methylarsinate and derived salts, B., 106.

Taylor, A. F., kier solution controller, (P.), B., 663.

Taylor, A. H., validity of flicker photometer measurements in heterochromatic photometry, B., 775*.

Taylor, R. P., and Taylorall Inc., rubber cement, (P.), B., 205.

Taylor, C. A., and Rinkenbach, W. H., properties of glycol acetate, A., 710.

stereoisomeric forms of bis(trimethylethylene nitrosoate), A., 817.

Taylor, C. E., electric furnace, (P.), B., 922.

Taylor, C. J. A. See Morgan, G. T.

Taylor, C. S. See Edwards, J. D.

Taylor, E., chlorination of the Manila water supply, B., 389.

Taylor, E., Chandler, E. F., Hill, T. A., and Taylor Laboratories, Inc., production of colloidal material [cellulose], (P.), B., 818.

conversion of cellular or fibrous [cellulosic] material, (P.), B., 818.

electrolytic apparatus [for deposition of cellulose], (P.), B., 835.

photographic film and method of marking it, (P.), B., 854.

Taylor, E., and Taylor Laboratories, Inc., treatment of fibrous or cellular [cellulosic] organic material, (P.), B., 818.

treating silk and cellulose material, (P.), B., 819.

treatment of organic material [cellulose], (P.), B., 819.

treating organic material [cellulose] and apparatus therefor, (P.), B., 819.

electric-battery construction, (P.), B., 835.

electrolytic cell [for deposition of cellulose], (P.), B., 835.

insulated electrical conductors, (P.), B., 835.

treating organic material [production of artificial leather], (P.), B., 840.

making smokeless powder, (P.), B., 854.

[electrolytic] manufacture of cellulose products, (P.), B., 945.

Taylor, E. M., base exchange and its bearing on the origin of coal, B., 568.

Taylor, E. E., and Electric Furnace Co., Ltd., electric resistance furnaces, (P.), B., 331.

Taylor, G. F., small resistance thermometer, A., 142.

Taylor, G. I., and Elam, C. F., distortion of iron crystals, A., 997.

Taylor, G. R. See Parsons, L. W.

Taylor, H. A., decomposition of nitrogen pentoxide and infra-red radiation, A., 185.

Taylor, H. P., and Brokamp, P. B., apparatus for reducing the offal in slaughter houses to grease and tankage, (P.), B., 171.

Taylor, H. S., fourth report of the Committee on contact catalysis, A., 365. photosensitisation and mechanism of chemical reactions, A., 583*. catalysis : an industrial development, B., 807*.

Taylor, H. S., Marshall, A. L., and Bates, J. R., chemical effects produced by resonance radiation, A., 252.

Taylor, H. S. See also Rogers, W. jun.

Taylor, J., technique of making thin celluloid films, A., 1118.

Taylor, J. B., apparatus for separating dust from air, (P.), B., 145*.

Taylor, J. B. See also Kunz, J.

Taylor, J. H., magnetic moments of the alkali metal atoms, A., 1075.

Taylor, J. E., and Famous Players-Lasky Corporation, producing colour pictures, (P.), B., 109.

Taylor, L. N., recovery of sodium hydrate [hydroxide] or carbonate [from alkali lyes from treatment of cellulosic materials], (P.), B., 630.

Taylor, (Miss) M., transference numbers of sodium and hydrogen in mixed chloride solution, A., 478.

Taylor, N. M., Spencer, M., and House, M., amylase from germinated wheat and rye, B., 139.

Taylor, N. W., magnetic properties of odd molecules, A., 566.

Taylor, N. W. See also Shaffer, S. N.

Taylor, P. A. See Lennard-Jones, J. E.

Taylor, P. B., free energy of ions measured by capillary electrode, A., 29.

Taylor, Q. W. See Germann, A. F. O.

Taylor, R. See Blair, E. W., and Ledbury, W.

Taylor, S. See Gen. Engineering Co. (Radcliffe), Ltd.

Taylor, T. C., and Iddles, H. A., separation of the amyloses in some common starches, B., 717.

Taylor, T. C. and Lehrmann, L., unsaturated fatty acids associated with corn [maize] starch, B., 686.

Taylor, W., kinetic activation as a factor in gas reactions, A., 124, 579*. photo-activation of chlorine, A., 366*. photo-activity of chlorine, A., 684*. chlorine gas filters in relation to reaction velocity, A., 1223.

Taylor, W. A., hydrogen-ion concentration; its meaning and its application [in water purification and water bacteriology], B., 469*.

Taylor, W. C., and Corning Glass Works, glass, (P.), B., 241*.

Taylor, W. C. See also Corning Glass Works.

Taylor, W. W., precipitation of soils by multivalent ions, I., A., 472.

Taylor, W. W., Pridieux, E. B. R., and Pool, H. G., reaction between selenium tetrachloride and copper, A., 925.

Taylor Laboratories, Inc. See Hill, T. A., and Taylor, E.

Taylor Inc. See Taylor, B. P.

Tchilingaren, A. See Favorski, A. E.

Te Aroka Dairy Co., Ltd., deodorising, cooling, and dehydrating fluid substances [milk, etc.], (P.), B., 74.

Technical Products Corporation. See Lowry, O.

Technical Research Works, Ltd. See Lush, E. J.

Technische Chemikalien Co., production of soft vulcanised rubber and vulcanite, (P.), B., 23.

Techno-Chemical Laboratories, Ltd. See Söderlund, O.

Tedesco, P. A., dextrose content of human erythrocytes, A., 85.

Teed, P. L. See Airship Guarantee Co., Ltd.

Teff, R. F. See Brown, O. J.

Teichmann, H. See Rüterswerke A.-G.

Teik, G. L. See Eaton, B. J.

Teinturerie de la Rize, dyeing cellulose acetate, (P.), B., 154.

Telsko, C. See Chikashige, M.

Teisen, T., apparatus for effecting the transfer of heat between gases; [recuperators], (P.), B., 426*.

crucible and like furnaces, (P.), B., 542.

Teitsworth, C. S., and Celite Co., adsorbent material [from silica gel], (P.), B., 345.

Tekelenburg, F. See Kolthoff, I. M.

Tellier, R. G., and Permutit Co., softening water; water-softening material, (P.), B., 518.

Telni, S. See Pisarshevski, L. V.

Temple, J. E. See Broadway Trust Co., Ltd.

Templeton, H. L., and Sherrard, E. C., tannin content of Western hemlock after immersion in sea water, B., 205.

Tepoh, W. See Heinrichs, H.

Tepper, W. See Rowe, F. M.

Terada, T., and Nakaya, U., form and structure of long sparks, A., 1069.

Terada, T., Nakaya, U., and Yumoto, K., spark discharge in heterogeneous media; the mechanism of lightning discharge, A., 653.

Terada, T., and Yumoto, K., propagation of combustion in gaseous mixtures, A., 1106.

Torechov, P. See Dedeck, J.

Terenin, A., action of the electric field on the optically excited spectrum of mercury, A., 707.

excitation of atoms and molecules to emission of light by means of illumination, II. A., 776.

Terenin, A. See also Ponomarev, N.

Terenin, A. P., constitution of mixed magnesium organic compounds, A., 1130.

Terenin, A. P., [with Bolotina, A.], magnesium alkoxides and their application in the synthesis of alcohols. II. isoButyl and isoAmyl alcohols, A., 268.

Terenin, A. P., [with Gribkov, J., and Titov, N.], magnesium alkoxides and their application to the synthesis of alcohols. III. Condensations between dissimilar alcohols, A., 382.

Terentieva, K. F. See Samoilov, Y. V.

Terényi, A. See Bodnár, J.

Termit, Ltd., A./S., protection of wood and other materials against termites and other gnawing insects, (P.), B., 129.

Tern, R. See Continental A.-G. I. Chemie.

Terni, A., and Padovani, G., action of sodium hypophosphite on stannous chloride, A., 255.

Terpstra, P., growth of crystals, A., 339.

Terpstra, P., and Westenbrink, H. G. K., crystal structure of lead iodide, A., 890.

Terpstra, P. See also Jaeger, F. M.

Terrell, J. T. See Parker, J. G.

Terrell, T., manufacture of incandescence gas mantles, (P.), B., 184*.

Terroine, E. F., and Bonnet, R., specific dynamic action of proteins, A., 639. energetics of growth. VIII. Efficiency of glucose and various organic acids for the growth of *Aspergillus niger*, A., 1178.

Terroine, E. F., and Mendler, A. M., effect of addition of ternary foodstuffs to milk on nitrogen retention during growth, A., 197.

influence of ternary food factors on nitrogen absorption during growth, A., 428.

Terry, E. M., and Milas, N. A., new oxidation product from *p*-benzoquinone, A., 1249.

Terry, H. See Aufenast, F.

Terry, H. C., application of the neutral wedge in a form of direct comparison spectrophotometer, A., 1118.

Terry, J. T., jun., and Metals Recovery Co., method of ore treatment, (P.), B., 711.

Tervaert, D. G. C., determination of blood-sugar, A., 763.

Tervert, J. N., protective paint coatings, B., 679.

Terziev, G. N. See Sundstrom, C.

Test, L. A., and Sooles, D. L., [detection of nickel], A., 40.

Testoni, G., adsorption phenomena, A., 789.

Testrup, N. See Söderlund, O.

Tetens, O. See Rekord Cement Ind. G.m.b.H.

Teufel, W. See Braun, J. von.

Tewari, J. D., and Dutt, S., dyes derived from β -phenylpyridinedicarboxylic acid, A., 1153.

Texas Co. See Adams, J. H., Behimer, O., Dearborn, R. J., De Florez, L., Hall, F. W., Holmes, R. C., Taveau, R. de M., Van Gundy, M. C., and Young, P.

Texas Gulf Sulphur Co. See Bacon, R. F., and Kobbe, W. H.

Thacker, G. See Marrack, J.

Thackwell, H. L., sludge tank and gas producer, (P.), B., 1030.

Thaler, A. C. See Glaser, E.

Thalhofer, W., protection of metallic surfaces against incrustation, (P.), B., 776*.

Thalhofer, W., and Akt.-Ges. für Chem. Ind. in Liechtenstein, protection of metallic surfaces against incrustation and corrosion, (P.), B., 472.

protecting from incrustations metallic surfaces which are in contact with water or other liquids, (P.), B., 473*.

Thannhauser, S. J., and Jenke, M., utilisation of glucosone by the diabetic, A., 317.

Thannhauser, S. J., Lurz, L., and Gara, P. von, nucleic metabolism. XIV. Uricolysis and uric acid excretion, A., 973.

Thannhauser, S. J., and Markowitz, W., effect of protein on the excretion of ketonic substances in severe diabetes; theory of diabetic disturbance, A., 859.

Tharaldsen, F., production of phosphorus in the electric furnace, (P.), B., 789.

electrothermic production of zinc, (P.), B., 922*.

Tharaldsen, F., and Lie, E., fertiliser, (P.), B., 800.

Thatcher, H. S., and Celite Co., recovered inorganic filter-aid, (P.), B., 472.

Thatcher, H. S., Josi, S. E., and Celite Co., process of treating sugar-beet diffusion juice, (P.), B., 686.

Thatcher, R. W., and Streeter, L. R., combined lead arsenate and lime-sulphur spray, B., 103.

adherence to foliage of sulphur in fungicidal dusts and sprays, B., 416.

Thau, A., desulphurisation of gas, B., 258.

low-temperature carbonisation of coal preliminary to coking, B., 616.

Thau, A. E., neutralisation of ammonium sulphate, B., 946.

Thayer, F. K., and Abbott Laboratories, antiseptic anaesthetic medicament, (P.), B., 853*.

Thaysen, A. C., and Bunker, H. J., bacterial decomposition of textile fibres. II. Deterioration of artificial silk through the action of micro-organisms, B., 234.

bacterial decomposition of textile fibres. IV. Action of *B. subtilis* and *B. mesentericus* on cellulose, B., 817.

Thaysen, A. C., Bakes, W. E., and Bunker, H. J., bacterial decomposition of textile fibres. III. Occurrence of humus compounds in deteriorated fabrics and the bearing of their formation on the origin of peat and coal, B., 305, 476*.

Thaysen, A. C. See also Desborough, A. P. H.

Thee, W. C. See Clark, G. L.

Theisen, E., apparatus for purifying, cooling, heating, mixing, or absorbing gases and vapours, (P.), B., 255.

Thellier, H., and Soc. pour l'App. Ind. des Brevets Penfaillit, retting flax and other vegetable fibres, (P.), B., 783*.

Theobald, E. See Badische Anilin- & Soda-Fabrik.

Theorell, A. H. T., quantitative determination of the lipins present in proteins salted out of horse plasma, A., 1166.

Therianlt, E. J., rate of deoxygenation of polluted waters, B., 724.

Thermal Industrial and Chemical (T.I.C.) Research Co., Ltd., and Rider, D., heat treatment of materials for distilling, drying, or carbonising them, (P.), B., 621.

Thermal Industrial and Chemical (T.I.C.) Research Co. See Duckham, A. McD., Morgan, J. S., and Rider, D.

Thermal Synd., Ltd. See Winslow, W. W.

Thermo Electric Battery Co. See Hermann, O.

Thewlis, J. See Bradley, A. J.

Thews, K. B., and Bell, W. A. J., recovering rare metals from their ores, (P.), B., 444.

Thews, K., manufacture of mixed tin [tin-lead alloy], B., 883.

Thibaud, J., nuclear structure of radioactive atoms and the emission of γ -ray spectra, A. C.

secondary γ -ray spectra: the origin of the continuous background and the variation of the relative intensity of rays, A., 106.

γ -ray spectrography; secondary β -spectra and crystalline diffraction, A., 333.

new method of using diffraction gratings applied to Millikan's study of the ultra-violet, A., 661.

Thibander, L., and Vitteaux, H., heat-treatment of steel rails, B., 365.

Thiede, B. See Weichselfelder, T.

Thiele, A., and Chemische Fabrik auf Aktien (vorm. E. Schering), manufacture of a pharmaceutical product; [compound of diallylbarbituric acid and 4-dimethylamino-1-phenyl-2 : 3-dimethyl-5-pyrazolone], (P.), B., 692*.

Thiele, A. See also Chem. Fabrik auf Aktien (vorm. E. Schering).

Thiele, H., and Boehringer Sohn, C. H., gelatin food, (P.), B., 719.

Thiele, H. See also Kautsky, H., and Lindemann, H.

Thlepeape, E., preparation of alkyl esters of 2-quinolone-4-carboxylic acid, (P.), B., 141.
 Thleimann, F., effect of lack of inorganic salts on man, A., 1171.
 Thiene, H. See Jenner Glaswerk Schott & Gen.
 Thier, C. See Stoermer, R.
 Thierry, E. H., sulphur compounds removed from a Persian petroleum by means of sulphuric acid, I., B., 116.
 Thies, B. K., dyeing apparatus, (P.), B., 318.
 Thies, O. J., *jun.* See Arbuckle, H. B., and Nichols, M. L.
 Thiessen, P. A., measurement of swelling, A., 124.
 Thiessen, R., micro-structure of coal, B., 476*.
 Thilenius & Pohl, diffusion of gaseous [fumigating] mixtures through building materials, B., 30.
 Thimann, M. See Tiede, E.
 Thivolle, L. See Fontès, G.
 Thode, C. See L. G. Farbenind. A.-G.
 Thoma, K., Chem. Fabr., and Götter, M., preparation of a derivative of 4-amino-1-phenyl-2-3-dimethyl-5-pyrazolone, (P.), B., 900.
 Thomas, A. W., sulphur tannage, B., 376.
 Thomas, A. W., chemical nature of vegetable tanning, B., 989.
 Thomas, A. W., and Foster, S. B., destructive and preservative effect of neutral salts upon hide substance, B., 23.
 action of ultra-violet light on hide protein, B., 69.
 behaviour of deaminised collagen; further evidence in favour of the chemical nature of tanning, B., 291.
 Thomas, A. W., and Kelly, M. W., ultrafiltration of vegetable tanning solutions, B., 290.
 quinone tannage, B., 504.
 does chromium combine with the basic or acidic groups of hide protein? B., 699.
 nature of vegetable tannage; tanning with mixtures of gallotannin and quinone, B., 639.
 Thomas, A. W., Kelly, M. W., and Foster, S. B., aldehyde tannage, B., 290.
 Thomas, A. W., and Mattikow, M., identification of rapeseed oil by isolation of crucifer acid, B., 499.
 Thomas, B., fertilising in relation to the disease resistance of crops, B., 842.
 Thomas, C. H., soft X-rays from iron, cobalt, nickel, and copper, A., 104, 1073.
 Thomas, C. H. See also Compton, K. T.
 Thomas, D. L., electrochemical treatment of unsaturated hydrocarbon compounds resulting from the cracking of oils, (P.), B., 623.
 Thomas, E. W. See Macy, R.
 Thomas, F., low-temperature vulcanisation [of rubber], B., 374.
 Thomas, Fritz. See Ruff, O.
 Thomas, J., Hereward, H. W., and Scottish Dyes, Ltd., production of hydroxy-anthraquinones, (P.), B., 312.
 Thomas, J., and Scottish Dyes, Ltd., production of [anthraquinone] dyestuff intermediates, (P.), B., 121.
 manufacture of dyestuff intermediates [2-chloroanthraquinone], (P.), B., 398.
 Thomas, J. See also Scottish Dyes, Ltd., and Thomson, R. F.
 Thomas, J. S., and Barker, W. F., partial pressures of water vapour and of sulphuric acid vapour over concentrated solutions of sulphuric acid at high temperatures, A., 236.
 Thomas, J. S. See also Pugh, W.
 Thomas, K. See Wagner, A.
 Thomas, Kirk. See Regerson, L. H.
 Thomas, L. H., motion of the spinning electron, A., 443.
 Kaufmann's experiment and the spinning electron, A., 1077.
 Thomas, M., controlling influence of carbon dioxide. V. Production of ethyl alcohol and acetaldehyde by cells of the higher plants in relation to concentration of oxygen and carbon dioxide, A., 208.
 Thomas, M. D., and Harris, K., moisture equivalent of soils, B., 762.
 Thomas, P., and Sibi, (Mile) M., structure of gels, A., 353.
 structure of gels; organogels obtained with benzoic acetic acid from sorbitol, A., 303.
 Thomas, R. P., and Harper, H. J., use of oat straw in a system of soil fertility, B., 640.
 Thomas, V. See Brubat, G.
 Thomas, W., quadratic Stark effect of the alkalis, A., 3, 217.
 Thomas, W., and Hawes, M., pickling process for metal plates, (P.), B., 62.
 Thomas, W. See also Blackburn, H. W.
 Thomas, W. A. See Welker, W. A.
 Thomas, W. K. S. See Loewenthal, A. S.
 Thomason, R. W. See Morgan, G. T.
 Thomassen, H., centrifugal separator, (P.), B., 1000*.
 Thompson, A. M. See Spitzley, R. L.
 Thompson, A. P., Holton, W. B., and Kremers, H. C., rare earths. XXXII. Preparation and properties of metallic yttrium, A., 439.
 Thompson, F. C. See Millington, W. E. W.
 Thompson, H. C. See Corbett, L. W., and Wilson, D. W.
 Thompson, H. J. See Granitite Manufacturing Co.
 Thompson, H. L. [flour] ash, B., 605.
 determination of protein [in cereals, etc.], B., 845.
 Thompson, J. See Kirkup, R. H.
 Thompson, J. G., materials of construction for nitrogen fixation, B., 873.
 resistance of metals [and alloys] to nitric acid, B., 1017.
 Thompson, J. McL., storage of vegetable produce, (P.), B., 383*.
 Thompson, K. See McLennan, J. C.
 Thompson, K. W. See Chambers, E. K.
 Thompson, L. See Clay, R. Ltd.
 Thompson, M. de K., formation of powdered copper in anode mud, B., 588.
 Thompson, M. R., acid zinc plating baths, B., 950.
 Thompson, M. S., and Du Pont de Nemours & Co., E. I., producing *N*-dihydro-1:2:1':2'-anthraquinonazine and derivatives, (P.), B., 577.
 Thompson, P., treating [bleaching] vegetable fibres, (P.), B., 189.
 Thompson, T. J. See Wing, H. J.
 Thompson, W. R. See Hussey, R. G.
 Thomsen, A. M., and Crown Willmette Paper Co., economical disposal of waste sulphite [cellulose] liquor, (P.), B., 534.
 Thomsen, K. See Houdremont, E.
 Thomsen, T. C., centrifugal separators, (P.), B., 999.
 Thomsen, C. H., effect of "blowing" on the composition of certain fatty oils, B., 552.
 Thomsen, D., and Pickett, F. N., food preparations made from meat and like edible animal matter, (P.), B., 639.

Thomson, D. L., pigments of butterflies' wings. I. *Melanargia galataea*, A., 424.
 pigments of butterflies' wings. II. Occurrence of the pigment of *Melanargia galataea* in *Dactylis glomerata*, A., 1168.
 Thomson, E., refrigerating apparatus, (P.), B., 176.
 Thomson, E., and General Electric Co., Ltd., purifying [quartz] fusions, (P.), B., 55.
 Thomson, G. P., free path of slow protons in helium, A., 218.
 scattering of positive rays by hydrogen, A., 656.
 Thomson, (Sir) J. J., radiation produced by the passage of electricity through gases, A., 988.
 Thomson, R. F., vat dyes and some recent developments, B., 397*.
 Thomson, R. F., Thomas, J., and Scottish Dyes, Ltd., manufacture of [benz-anthrone] dyestuffs and intermediates, (P.), B., 576.
 dyestuffs and dyestuff intermediates [halogenoalkoxybenzanthrones and isodibenzanthrones], (P.), B., 868.
 Thomson, R. M. See Batchelor, R. F., and Drinker, P.
 Thomson, T., and Nisbet, N., apparatus for filtering dust-laden gases, (P.), B., 18, 178*.
 Thoreau, R., X-ray spectra of the lower elements. I. and II., A., 329.
 Thoreau, R. See also Siegbahn, M.
 Thorne, P. C. L., and Pates, E. W., nickel sulphide sols. I., A., 350.
 Thornton, J. E., kinematograph multi-colour films, (P.), B., 515.
 multi-colour kinematograph or other films, (P.), B., 516.
 kinematograph and other colour films, (P.), B., 516.
 kinematograph and other colour positives, (P.), B., 516.
 kinematograph and other positive films, (P.), B., 516.
 Thornton, W. M., models of electron structure, quantum action, and the gravitational field, A., 221.
 Thornton, W. P., refining or treating sulphur, (P.), B., 666.
 Thorp, L., and Lambert Thorp Co., manufacturing barbituric acid derivatives, (P.), B., 514.
 Thorpe, G. S., [determination of] potash in mixed fertilisers, B., 601.
 Thorpe, J. F. See Ingold, C. K., Packer, J., and Rothstein, E.
 Thorpe, W. V., oxytocic principle of the pituitary gland, A., 644.
 Thorpe, W. V. See also Dudley, H. W.
 Thorrell, T. See Schenck, R.
 Threadgold, H. See Hind, H. L.
 Thresh, J. C., and Beale, J. F., purification of water and action of various waters on lead and copper pipes, B., 468.
 Thnau, U. J., rôle of colloid mills in utilising tanning materials in the tanning of skins, B., 957.
 Thnau, U. J., and Vidal, M., analysis of commercial lactic acid, B., 963.
 Thumiger, L. See Gina, M.
 Thune, S. See Holter, K.
 Thunholm, K. L. E., apparatus for evaporating liquids indirectly, (P.), B., 473*.
 Thurlow, H. A. R. See Gross, Sherwood, & Heald, Ltd.
 Thurlow, S. See Harrison, D. C., and Wilson, D. W.
 Thurm, R., producing organic chlorides, (P.), B., 898.
 Thwaites, R. E., and Packer, J., carbonisation research in Australia with a continuous vertical retort, B., 180.
 Tickle, J., & Co., Ltd. See Hough, T.
 Tiddy, W. See Heffner, L. R. W.
 Tidmore, J. W. See Parker, F. W.
 Tieke, E., production of hydrides, (P.), B., 53.
 preparation of theobromine from cacao waste, (P.), B., 386.
 Tieke, E., Schiele, A., and Goldschmidt, F., formation of gold from mercury, A., 922.
 Tieke, E., and Thimann, M., phosphorescent silicon disulphide, activated by carbon, A., 1081.
 pyrolytic preparation of sulphides, particularly silicon disulphide and boron sulphide, by means of aluminium sulphide, A., 1112.
 Tiedemann, W. V. D., free chlorine in chlorinated tank effluents, B., 613.
 Tiedemann, H., formation of hair copper in copper mattes; system copper-iron-sulphur, B., 710.
 Tiedemann, O., system aluminium-zinc, B., 160, 751.
 Tiedje, W. See Braune, H.
 Tiedtke, R. See Farbw. vorm. Meister, Lucius, & Brüning.
 Tieri, L., determination of Avogadro's number by measurements of the birefringence of solutions of dialysed iron, A., 12.
 Tletz, E. See Claisen, L.
 Tiffeneau, M., and Lévy, (Mile) J., ketone-alcohols of the general formula, CIPh(OH)-CO-R , A., 71.
 isomerism of ethylene oxides and comparison of saturation capacities of cyclic and acyclic radicals, A., 383, 818.
 Tiffeneau, M. See also Orékhov, A.
 Tilgne, M., action of ammoniacal water on feed pipes and boiler plates, B., 143.
 Tiltschke, M. D., decomposition of complex cyclic esters on heating; decomposition of ethylene succinate, A., 713.
 Tillberg, K. H. R., briquettes from pulverised fuel, (P.), B., 860.
 Tilley, G. S., process of treating alunite, (P.), B., 743.
 Tillmans, J., and Alt, A., tryptophan-content of proteins; determination of tryptophan, A., 189.
 Tillquist, H. T. See Härden, J.
 Tilson, D. H., and Aluminum Co. of America, method of starting electrolytic cells [for refining metals], (P.), B., 216*.
 Timens, R. See Winzenried, F.
 Timms, W. B., Parsons, C. S., Carnochan, R. K., and Godard, J. S., reports of investigations; ore dressing and metallurgical laboratory, B., 672.
 Timofejava, A. See Steppuhn, O.
 Timorev, A. See Bursian, V.
 Timpany, C. R. See Germann, A. F. O.
 Tingey, H. See Trease, G. E.
 Tingey, H. C., and Gerke, R. H., ultra-violet absorption spectra and photochemical decomposition of gaseous hydrogen bromide and iodide, A., 882.
 Tingle, A., [treatment of] fibres [manufacture of paper pulp], (P.), B., 739.
 Tinker, F. Apparatus for production of gasoline, (P.), B., 232*.
 Tinker, J. M. See Gubelmann, I.
 Tipping, A. H. See Morton, R. A.
 Tirloni, L., Baroni reaction for neutral glass for pharmaceutical purposes, B., 440.
 Tirona, M., nature and availability of the plant-food constituents of Philippine guano, B., 684.

Tisdall, F. F., Drake, T. G. H., and Brown, A., carbohydrate metabolism of infants, A., 861.

Tisdall, F. F. See also Drake, T. G. H.

Tisellius, A. See Svedberg, T.

Tissot, examination of nitrocellulose in polarised light, B., 723.

Titanium Alloy Manufacturing Co. See Kinzie, C. J.

Titeley, A. F., conditions of formation of rings attached to the *o*-, *m*-, and *p*-positions of the benzene nucleus. II. Reduction of *m*- and *p*-phenylene-diacetonitrile, A., 612.

Titov, V. See Terentlev, A. P.

Titus, R. W., Hughes, J. S., Hinshaw, W. R., and Fitch, J. B., destruction of vitamin-A in milk by ultra-violet light, B., 846.

Titz, I. N. See Zelinski, N. D.

Tival, H. L. P., and Descombes, F. A., desiccation, particularly of substances of organic origin, (P.), B., 26.

Tizard, H. T., explosions in petrol engines, B., 618.

Tizard, H. T., and Pye, D. R., ignition of gases by sudden compression, A., 690.

Tjulin, A., influence of calcium carbonate on the decomposition of organic substances in soil, B., 415.

injurious action of heavy dressings of calcium carbonate on Podsol soils in connexion with the special character of the biological processes occurring therein, B., 415.

Toabe, K. See Mitchell, T. A.

Tobci, G. zum. See Weltzien, W.

Tobler, R. See Staudinger, H.

Toch, M., china wood [tung] oil, B., 199.

paint and varnish; yesterday, to-day, and to-morrow, B., 837*.

Todt, A. H., manufacture of gelatin, (P.), B., 138, 456.

Todt, C. W. See Kenner, J.

Toda, S., oxidation of oxalic acid by iodic acid in aqueous solution, A., 806.

activation of hydrogen by iron, A., 943.

action of ethylcarlylamine on heavy-metal catalysis, A., 943.

preparing artificial silk yarn, (P.), B., 975.

Tödt, F., determination of the effect of decolorising carbons on sugar juices by measurement of the surface tension, B., 641.

simple method of measuring hydrogen-ion concentration and its significance in the beet-sugar industry, B., 927.

Tödt, F. See also Dorfmüller, G.

Toeldeite, W., receiver for determination of solvent in paints, varnishes, etc., B., 202.

Toeldeite, W. See also Wolff, Hans.

Toja, V., and Ceva, U., electrolytic preparation of glycollic acid, B., 690.

Tokareva, A., nitrogenous extractives from etiolated *Lupinus luteus* seedlings, A., 1183.

Tokody, L., crystallography and optical properties of schafarzikite, A., 461.

Tokyo Imperial Industrial Laboratory, purification of sugar juice by chlorination, (P.), B., 170.

Tolksdorf, S. See Noethling, W.

Tolman, C. P., and National Lead Co., corrosion apparatus [for manufacture of white lead], (P.), B., 554*.

Tolman, R. C., derivation of the equation for the effect of temperature on reaction rate, A., 32.

Tolman, R. C., and Badger, R. M., test of the correspondence principle based on the prediction of the absolute intensities of spectral lines, A., 451, 555.

Tolman, R. C. See also Krato, N. W.

Tolstonov, A. See Regan, J. C.

Tomasson, H., chemical changes in blood during narcosis; does ether narcosis produce alkalosis? A., 642.

Tomíček, O. See Kolthoff, I. M.

Tomihisa, R. See Kitai, G.

Tomita, M., aminohydroxy-compounds which show the biuret reaction, A., 1129.

Tomita, M., and Fukagawa, T., aminohydroxy-compounds which show the biuret reaction. II. Synthesis of γ -hydroxyornithine, A., 1235.

condensation of indole with triketohydridene hydrate, A., 1257.

Tomkeiev, S. I., structure of aragonite, A., 339*.

chloritic minerals in the basaltic rocks of Derbyshire, A., 1119.

Tomoda, Y. See Atsuki, K.

Toms, H., crystalline bromides from linseed and other drying oils, B., 794.

Tonegutti, M., reaction of nitroglycerin powders to the Angel test in relation to the stability to heat, B., 174.

stability of explosives as an additive property, B., 174.

chemical stability of [propulsive] explosives as an additive property, B., 646.

chemical stability of nitroglycerin powders, B., 805.

Tonkin, R. See Scottish Dyes, Ltd.

Tonnet, J. See Loepfer, M.

Toogood, H. J., manufacture of coke, (P.), B., 779.

Toogood, H. J., and Dempster, R., & Sons, gas-retort settings, (P.), B., 699.

Toogood, H. J. See also Illingworth, S. R.

Topley, B. See Chamberlain, N. H.

Toporescu, E., decomposition of ozoerite by cracking, B., 428*.

Topping, J. See Chapman, S.

Torell, T. F. See Peek, R. L.

Toriyama, Y. See Setoh, S.

Torkildsen, E. See Olsen, O. R.

Torré y González, C., *p*-alkyloxybenzhydrylamines, A., 396, 609.

Torulf, H. G., apparatus for charging circular sintering pans, (P.), B., 198*.

Tostnerud, M., fluorides and double fluorides of aluminium, A., 255.

Totok-Gibaru, C., lead-free enamels, (P.), B., 323, 879.

Touplain, F. See Bordas, F.

Tournié, R. H. M. L., direct production of iron and steel, (P.), B., 195.

Toussaint, L. See Schleicher, A.

Townend, D. T. A. See Bone, W. A.

Townend, F. S. See Smith, E. W.

Townsend, J. S., motion of electrons in gases, A., 3.

Townsend, J. S., and Focken, C. M., transference of energy in collisions between electrons, A., 878.

Toy, F. C., measurement of radiation intensities by photographic methods, A., 135.

action of light on silver bromide emulsions, and the rôle of the sensitising nuclei, B., 612.

Toyama, Y., and Tsuchiya, T., catalytic hydrogenation of highly unsaturated acids. I. Course of hydrogenation of methyl esters of highly unsaturated acids in presence of nickel catalyst, B., 286.

Trachsel, F., manufacture of a preservative, (P.), B., 203.

Tracer, L. See Hanemann, H.

Tracta-Mosca, F., pyruvic acid in alcoholic fermentation, A., 978.

olive oil, I., B., 677.

Trall, D. See Macbeth, A. K.

Trall, R. J., and McClelland, W. R., hydrometallurgical treatment of iron sulphide ores for the production of electrolytic iron and the recovery of sulphur and other metals as by-products, B., 670.

Trall, R. J. See also Monk, R. H.

Trapesnikov, A., change of colour of barium platinocyanide under the action of X-rays and on heating, A., 885.

Tranbe, J., manufacture of glazed or enamelled ware, (P.), B., 90*.

deposition of aqueous mineral suspensions, (P.), B., 283.

Traube, W., Lange, Willy, Stahn, R., Justh, R., and Baumgarten, P., processes of reduction, oxidation, and autoxidation, A., 267.

Trautner, W. See Borsche, W.

Trautz, M., and Emert, O., deviations from Dalton's law of partial pressures, A., 343.

Trautz, M., and Moschel, W., determination of the mol. wt. of fatty acids, A., 997.

Trautz, M., and Narath, A., viscosity of gaseous mixtures, A., 671.

Trautz, M., and Scheifele, B., photolysis of gaseous hydrogen iodide in the light of the quartz mercury-vapour lamp, A., 1013.

Trautz, M., and Ufer, E., monomeric formaldehyde, A., 821.

Trautz, M., and Weizel, W., viscosity of sulphur dioxide, and of mixtures of it with hydrogen, A., 118.

Travers and De Golombinoff, silica bricks; thermal analysis, B., 274.

silica bricks; dilatometric analysis of raw materials, B., 361.

Travers, A., mechanism of the oxidation of manganese [in a manganous salt] to permanganic acid by the Proctor-Smith reaction, A., 581.

to the determination of manganese, A., 704.

Travers, A., and Houot, thermal study of electrolytic lead; allotropy of lead, A., 893.

hardening of printing type alloys, B., 672.

Travers, A., and Malaprade, L., constitution of solutions of molybdc acid, A., 925.

constitution of the molybdates, A., 1114.

molybdc acid and molybdates, A., 1219*.

Travers, A. See also Longhampton, L.

Travers, M. W., resistance to the flow of gases in the fuel bed of a coke-fed furnace or water-gas generator, B., 305.

Travers, M. W., Clark, F. W., and Regenerative Coal Gasification System, Ltd., manufacture of gas, (P.), B., 623*.

Travniček, M., samarium phosphors, A., 455.

Traxl, W., desilvering old [photographic] films, (P.), B., 300.

Traxler, R. N., and Germann, F. E. E., action of red phosphorus on iodine in organic solvents, A., 696.

Treadwell, W. D., and Köhl, A., determination of the fluorine ion. II., A., 701.

formation of carbon tetrafluoride in the technical recovery of aluminium, B., 671.

Treasie, G. E., and Tingey, H., carbon tetrachloride in pharmacy, B., 803.

Tredelenberg, P., active substances of the posterior lobe of the hypophysis present in the cerebrospinal fluid, A., 1064.

Treft, W., Ritter, F., and Wittrisch, H., German essential flower-extract oils, B., 850.

Treibs, A. See Fischer, Hans.

Treichel, O., colloid chemistry and printing, B., 189.

Trelease, H. M. See Trelease, S. F.

Trelease, S. F., and Trelease, H. M., toxicity and antagonism in salt solutions as indicated by growth of wheat roots, A., 1066.

Trénel, M., electrometric determination of the hydrogen-ion concentration of soils, waters, chemical solutions, etc., (P.), B., 208, 685.

is the potato an acid-sensitive plant? B., 416.

significance of soil reaction in practical agriculture, B., 457.

can the "lime-requirement" of a soil be deduced from the reaction of a suspension of the soil in potassium chloride solution? B., 558.

Trente, A. N. N., apparatus for determination of specific gravity of liquids, B., 935.

Trent, W. E., process of manufacturing fuel, (P.), B., 263*.

cracking coal and oil, (P.), B., 732.

treating carbonaceous materials, (P.), B., 732.

Trent, W. E., and Trent Process Corporation, method of treating coal products, (P.), B., 261.

separating and purifying [hydrocarbon] oil, (P.), B., 701*.

recovering by-products from coal, (P.), B., 732.

Trent Process Corporation. See Trent, W. E.

Trepennhauser, M. See Wartenberg, H. von.

Treibl, J. P., partial splitting [by saponification] of mixed-acid glycerides, A., 481.

Trevan, J. W., micrometer syringe, A., 211.

modification of the deflexion balance, A., 706.

Trevan, J. W., and Bainbridge, H. W., determination of calcium in blood-serum, A., 762.

Trey, F., unipolarity phenomena in compressed powders, A., 115.

Trickey, J. P., and Leuck, G. J., furfuraldehyde derivatives as rubber accelerators, B., 890.

Trielov, H. See Rojahn, C. A.

Trifonov, N., magnetic susceptibility of binary liquid systems, A., 234.

systems potassium chloride-potassium oxalate-water and potassium oxalate-manganese oxalate-water, A., 246.

properties of potassium mercuric oxalate, A., 252.

Trillat, J. J., X-rays and long-chain organic compounds; spectrographic study of structure and orientation, A., 890.

X-ray spectrographic investigations on lubricants, B., 349.

effect of X-rays of long wave-length on *B. prodigiosus*, B., 998.

Trition, F. J., theory of the Carbo process, B., 388.

Triumph Steel Co. See Crist, D. M.

Trivelli, A. P. H., and Sheppard, S. E., visible decomposition of silver halide grains by light, B., 173.

Trivelli, A. P. H. See also Sheppard, S. E.

Trkal, V., dynamics of the helium atom, A., 451.
 Troberg, B. See Hägglund, E.
 Trocknungs-, Verschwendungs- & Vergasungs-Ges.m.b.H., Honigmann, L., and Bartlung, F., furnaces, (P.), B., 99.
 Troedsson, J. S. W. See Hellings, G.
 Tröger, J. [with Pape, C., and Kestenbad, J.], influence of the 8-methoxyl group in 8-methoxy-3-arylsulphonyl-2-methylquinoline derivatives on their addition and condensation reactions; behaviour of the initial and condensation products towards nascent hydrogen, A., 1258.
 Tröger, J., and Dimitrov, D., 2-phenyl-3-anisolesulphonylquinolines and 2-phenyl-3-phenoxyisulphonylquinolines, A., 78.
 Tröger, J., and Dunker, E., 2-amino-3-methoxybenzaldehyde and some derivatives, A., 68.
 condensation of 4-methoxy-2-methylquinoline with aromatic aldehydes, A., 525.
 Tröger, J., and Fromm, H., influence of position of nitro- and amino-groups on the reactivity of the aldehydo-group in nitro- and amino-derivatives of m-hydroxy- and m-methoxybenzaldehydes, A., 68.
 Tröger, J., and Gero, S., [quinoline derivatives from] 2-amino-3-methoxybenzaldehyde, A., 1045.
 Tröger, J., and Pahle, G., synthesis of 3-arylsulphonyl-2-arylsulphonylmethylquinolines, their fission by reduction and by acids, and the determination of their constitution, A., 523.
 Tröger, J., and Schaefer, R., halogen and nitro-derivatives of benzene- and toluene-azonaphthylamine, their solid diazonium salts, and conversion of the latter into the corresponding hydrazinesulphonic acids, A., 1032.
 Tröger, J., and Ungar, A., reduction of β -arylsulphonylquinoline derivatives, A., 524.
 Troensegaard, N., and Koudahl, B., acetylation of blood proteins. VII, A., 634.
 cholesterol as prosthetic group in serum-globulin. VIII, A., 634, 1166.
 Tröster, A. See Kremann, R.
 Trojan Powder Co. See Bronstein, J. B., and Snelling, W. O.
 Trollhättans Elektrothermiska Aktiebolag. See Andersen, F., and Cornelius, G. E.
 Tronolone, D. See Kelley, W. F. D.
 Tropf, C. See Giemsa, G.
 Tropsch, H., solution of common salt as a confining liquid for gas analysis, B., 427.
 decomposition of "synthol" at atmospheric pressure, B., 652.
 treatment of wood charcoal with water under pressure and at high temperatures, B., 859.
 higher-boiling constituents of "synthol," B., 860.
 Tropsch, H., and Philippovich, A. von, artificial production of coal from cellulose and lignin in the presence of water, B., 858.
 condensation of methyl alcohol in the presence of contact substances, B., 897.
 Tropsch, H., and Roelen, O., separation of paraformaldehyde from gases containing formaldehyde, B., 897.
 Tropsch, H., Schellenberg, A., and Philippovich, A. von, reduction of carbon monoxide, B., 776.
 Tropsch, H. See also Fischer, F.
 Troquay, P. H. See Schleicher, A.
 Trotman, E. R., determination of dissolved oxygen in effluents, B., 613.
 Trotman, E. R. See also Trotman, S. R.
 Trotman, S. R., and Bell, H. S., sulphur content of wool, B., 150.
 Trotman, S. R., and Trotman, E. R., chlorination of wool, B., 480.
 conditions governing the bleaching of wool with hydrogen peroxide, B., 534.
 Trotman, S. R., Trotman, E. R., and Sutton, R. W., proteins of wool, B., 150.
 True, O. S. See Herty, C. H., jun.
 Truedell, D. See Schneider, D.
 Truffaut, G., and Bezzonoff, N., effect of metallic aluminium on nitrogen-fixing bacteria, A., 545.
 Trumble, M. J., distilling carbonaceous materials, (P.), B., 572.
 apparatus for producing solid [carbonised] fuel, (P.), B., 699.
 apparatus for distilling hydrocarbons, (P.), B., 790.
 apparatus for refining oil, (P.), B., 700.
 continuous refluxing still, (P.), B., 700.
 producing coke, (P.), B., 812.
 Trumbull, H. L., safeguarding laboratory motors, A., 932.
 Trumbull, H. L. See also Winkelmann, H. A.
 Trumpp, B., maximum intensity and width of lines of the principal series of sodium, A., 101.
 Trunner, E., fertilising action of calcium carbonate, B., 415.
 Truran, W., and Minerals Separation North American Corporation, coal concentration, (P.), B., 971.
 Trusler, R. B., and Roessler & Hasslacher Chemical Co., production of amide acid sulphates from nitriles, (P.), B., 608.
 production of esters from amide acid sulphates, (P.), B., 609.
 Trusty, A. W. See Wood, A. E.
 Truszkowski, R., purine metabolism. I. Variations in the nuclear-plasmic ratio in the adult albino rat. II. Synthesis of purines by the adult mammalian organism, A., 638.
 Truthe, W., behaviour of the platinum metals towards silver and gold during capping at 1100-1200°, A., 896.
 Trutwin, H., stable solution of unstable halogen compounds of heavy metals, (P.), B., 237.
 Trutzer, E., preparation of stable, dispersible, dry material, (P.), B., 256.
 Tryhorn, F. G., and Wyatt, W. F., adsorption. I. Adsorption by coconut charcoal from alcohol-benzene and acetone-benzene mixtures, A., 19, 340*. adsorption. II. Adsorption by coconut charcoal of saturated vapours of pure liquids, A., 346, 788*. adsorption. III. Stages in adsorption by coconut charcoal from mixed vapours, A., 346, 788*.
 Trzecilak, S. See Bekier, E.
 Tsakalots, A. E., trypanocidal action of the cinchona alkaloids *in vitro*, A., 540.
 Tschan, M. See Karrer, P.
 Tschepelveztski, M. See Schilov, N.
 Tschekeres, A., nitrogen metabolism in lead poisoning, A., 200.
 Tschekeres, A., and Gorodissky, H., effects of narcotics on the composition of the cerebral cortex, A., 431.
 Tschernik, G. P., analysis of eudialite from the Chibine Mountains and of a product of its change, A., 596.
 Tscherning, H., comparison of a new ferro-nickel [permax] of remarkable magnetic properties with permalloy, B., 58.
 Tschernoshukov, N., adsorption of resins by paraffin wax and solidification of paraffin-containing products, B., 307.
 Tschirch, A., detection and approximate evaluation of ergot, B., 848.
 Tschirch, A., and Schäfer, H. H., comparison of stick-axes of different origins, B., 99.
 Tschirva, E. F., scorodite from the Berezovski mine in the Urals, A., 595.
 Tschishevskii, N., analysis of boron alloys, B., 634.
 Tschitschibabin, A. E., tautomerism of 2-aminopyridine. V. 2-Phenylpyrimidinazole and the conditions for the preparation of homologues of pyrimidinazole, A., 1153.
 Tschitschibabin, A. E., and Konovalova, R. A., alkylides of 2-aminopyridine, A., 1153.
 Tschitschibabin, A. E., and Menschikov, G. P., alkylation of pyridyl-2-nitroamine, A., 845.
 Tschitschibabin, A. E., and Oparina, O. P., benzoylation of 2-pyridone, A., 179.
 Tschitschibabin, A. E., and Persic, R. L., benzenceldiazo-2-aminopyridine, A., 845.
 Tschitschibabin, A. E., and Pozdniakov, N. M., 2:5-diaminopyridine, A., 845.
 Tschitschibabin, A. E., and Schedler, A. A., halogen derivatives of diphenylmethane, A., 159.
 Tschitschibabin, A. E., and Sergejev, P. G., phenylated derivatives of *oo*-ditolyl, A., 610.
 Tschitschibabin, A. E., and Szokov, P. G., acylation of 2-hydroxypyridine, A., 179.
 Tschmutov, K. See Vosnessenski, S.
 Tschopp, E., micro-determination of sodium, A., 39.
 Tschudi, P. See Kehrmann, F.
 Tschutarov. See Perschke, W.
 Tschugaev, L., and Chilopin, W. [with Fritzmann, E.], oxidation of platinum complex compounds. I. Oxidation by hydrogen peroxide and ozone, A., 373.
 Tschul, J. See Kehrmann, F.
 Tseng, K. F. See Sato, M.
 Tso, E., effect of chemical preservation of eggs upon the stability of their vitamin contents, B., 338.
 Tsou, K. See Genggross, O.
 Tsubata, M., preparing a painting material of powder form for use with either water or oil, (P.), B., 333*.
 Tsuibo, S., genetic interpretation of extrusive rocks, A., 933.
 dispersion method of discriminating rock-constituents, A., 933.
 Tsuchiya, S., excretion of phosphoric acid in the urine in psychoses, A., 538.
 excretion of phosphoric acid in the urine in rabbits treated with anti-cerebral scrum, A., 538.
 Tsuchiya, T., See Toyama, Y.
 Tsuji, T., formula for the critical congealation concentration of electrolytes for the precipitation of mastic sol, A., 795.
 Tsujimoto, M., fatty acids of "azame" liver oil; fatty acids of shark and ray liver oils, II, B., 593.
 constitution of the unsaturated acid $C_{11}H_{24}O_2$ from sperm oil, B., 636.
 marine animal oils, B., 636.
 lower acids of the oleic series in "tszu" and "kuromoji" seed oils, B., 637.
 new fatty acids in shark liver oil; fatty acids of shark and ray liver oils. I., II., 712.
 composition of herring oil. I. Saturated acids and acids of the oleic series of "o-nishin" (great herring) oil, B., 758.
 [detection of] whale oil, B., 986.
 detection of fish oils, B., 1020.
 Tsujimoto, M., and Kimura, K., clupanodonic acid and certain derivatives, A., 1226.
 Tsukamoto, J., specific electrical resistance of tungsten wires, B., 365.
 Tsukamoto, T. See Asahina, Y.
 Tsurumi, S. See Nomura, H.
 Tubize Artificial Silk Co. of America. See Bindschedler, E., and Juer, G.
 Tucek, J. See Milbauer, J.
 Tucker, E. L., Gates, J. F., and Head, R. E., effect of cyanogen compounds on the floatability of pure sulphide minerals, B., 366.
 Tucker, N. P. See Rosenhain, W.
 Tucker, S., and Minerals Separation, Ltd., concentration of ores, (P.), B., 711.
 Tucker, S. II., iodination in the carbazole series, A., 622.
 Tucker, W. A. See French, H. J.
 Tulin, A. F. See Bobko, E. W.
 Tuley, W. F., and Adams, R., reduction of cinnamaldehyde to cinnamyl alcohol in presence of platinum oxide-platinum-black and promoters. XI, A., 165.
 Tuerla, P., rapid and slow coagulation of polydisperse systems, A., 1005.
 Tuerla, P. See also Wiegner, G.
 Turnley, H. G., chemicohistological study of leather manufacture. I. Structure and properties of freshly flayed steer skin, B., 452.
 Turner, A. H. See Eddy, C. E.
 Turner, B. See Grosvenor Scientific Products, Ltd.
 Turner, D. See Stott, V. H.
 Turner, E. E. See Child, T. B., Dennett, H. G., Hunt, A. F., Le Fèvre, R. J. W., and Roberts, E.
 Turner, F. B. See Martin, G.
 Turner, H. G. See Sinkinson, E.
 Turner, L. A., arc spectra of iodine, bromine, and chlorine in the Schumann region, A., 550.
 Turner, L. A., and Compton, K. T., absorption of the enhanced mercury line 1942.5 Å by ionised mercury vapour, A., 1071.
 Turner, L. A. See also Mulliken, R. S.
 Turner, T. H. See Slater, I. G.
 Turner, T. W., effect of varying the nitrogen supply on the ratios between the tops and roots in flax, B., 601.
 Turner, W. A., apparatus for wet ashing, A., 700.
 Turner, W. A. See also Meigs, E. B.
 Turner, W. E. S., composition of glass suitable with automatic glass-forming machines, B., 555.
 attack of arsenic compounds on fireclay refractory material, B., 667.
 physical properties of glasses; relationship to chemical composition and mode of preparation, B., 789*.
 Turner, W. E. S., and Winks, F., influence of boric oxide on the properties of chemical and heat-resistant glasses. I., B., 238.

Turner, W. E. S., and Winks, F., influence of boric oxide on the properties of chemical and heat-resisting glasses. II. Resistance to chemical reagents, B., 584.

Turner, W. E. S. See also Cousen, A., Firth, E. M., and Parkin, M.

Turova-Pollak, M. B. See Zelinski, N. D.

Tuttle, H. W., collecting, refining, and utilising by-products from metals treated in retorts, (P.), B., 369.

Tutton, A. E. H., alkali perchlorates and a new principle concerning the measurement of space-lattice cells, A., 888.

Tunk, J. H. van der. See Coster, D.

Tuwin, L. See Myssovski, L.

Tweedy, S. K. See Partington, J. R.

Tweedy, W. R. See Reed, C. I.

Twiss, D., hexyloresorcinol [2:4-dihydroxyphenyl *n*-amyl ketone] and some of its derivatives, A., 1041.

Twiss, D. F., importance of particle character in a rubber "pigment," B., 956.

Twiss, D. F., and Murphy, E. A., commoner mineral ingredients for rubber, B., 502.

Two-Tone Corporation, and Mijer, P., dyeing, colouring, or coating of textiles and other articles [with atomised dyes], (P.), B., 741*.

method and apparatus for dyeing, colouring, or coating materials [fabrics], (P.), B., 976.

Twort, F., disintegrators for grinding coal and the like, (P.), B., 82*.

Twyver Works, Ltd. See Brandwood, J.

Tykokiner, J. T., and Kunz, J., production and control of successive ionisation by collision in a photo-electric cell, A., 1073.

Tyler, M., and Underhill, F. P., influence of pregnancy on lipins of blood, A., 199.

Tyler, R. G., fineness modulus for [water] filter sand, B., 29.

Tyndall, A. M., and Grindley, G. C., mobility of ions in air. I. Negative ions in moist air, A., 219.

mobility of ions in air. II. Positive ions of short age, A., 219.

Tyndall, A. M., and Phillips, L. R., mobility of ions in air. III. Air containing organic vapours, A., 877.

Typpke, K. See Heyden, H. von der.

Tyler, D., manufacture of iron perchloride, (P.), B., 360.

manufacture of barium nitrate, (P.), B., 433.

manufacture of hydrochloric acid, (P.), B., 979.

Tyler, D. See also Pease, E. L.

Tyrrell, W., briquetting, (P.), B., 693.

U.

Ubbelohde, L. See Oberhainische Handelsges.m.b.H.

Uehida, S., carbohydrate metabolism of the central nervous system. III. Carbohydrate and glycogen content of the central nervous system of normal and narcotised animals, and of animals subjected to prolonged treatment with sodium bromide, A., 427.

reaction mechanism of the catalytic oxidation of ammonia, A., 1214.

primary decomposition of coal, B., 569.

Uchida, S., and Sasaki, K., action of nitric acid on aluminium, B., 633.

Uchida, S. See also Asher, L.

Uchida, Y. See Fukuda, M.

Ucko, H., and Bans, H. W., peroxydase. III. Kinetics, A., 1275.

Ucko, H. See also Bans, H. W., and Bernhardt, H.

Udylite Process Co., Louth, M. E., and Young, A. W., electroplating with cadmium, (P.), B., 675.

Udylite Process Co. See also Pierce, H. C.

Ueda, Y., Japanese dyeing tannins. III. Tannin in the leaves of *Rhus trichocarpa* (Yamahaze), B., 1021.

Ueda, Y., and Ishimada, K., Japanese dyeing tannins. IV. Leaves of *Rhus javanica* (Fushinoki), B., 1021.

Uemura, T. See Shiba, Y.

Ueno, S., formation of saturated solid *iso*-acids during the hydrogenation of fatty oils. I. Presence of *iso*-acids in hardened sardine oil, B., 200.

Ueno, S., and Kizze, N., formation of unsaturated solid *iso*-acids during the hydrogenation of fatty oils. II. Presence of *iso*-acids in hardened chrysanthemum oil, B., 637.

Ufer, A. See Gesellschaft für Wärmetechnik.

Ufer, E. See Trautz, M.

Uhde, F., manufacture of alkaline-earth nitrides, (P.), B., 322.

synthesis of ammonia, (P.), B., 979.

Uhland, R. E. See Albrecht, W. A.

Uhlenbeck, G. E., and Goudsmit, S., spinning electrons and the structure of spectra, A., 215.

Uhlenbeck, G. E. See also Goudsmit, S.

Uhlenbrack, P. See Brinkner, B.

Ulbirch, E. See Grün, A.

Ulex, H., dry yeast, B., 689.

Ulich, G. See Löwenbein, A.

Ulich, H. See Walden, P.

Ullman, F., and Benfey, H., depilation of hides and skins, (P.), B., 505.

Ullmann, F., oxidation of 4-acetamido-*a*-naphthol, A., 609.

Ullmann, G., clarification and decolorisation of waste water from dyeworks, (P.), B., 470, 614*.

Ullmann, K. See Chemische Fabrik Niederrhein Ges.

Ullrich, G., and Krupp, F., Grusonwerk Akt.-Ges., wet magnetic separation, (P.), B., 370*.

Ulmen, P. C., Becker, H. H., and Mann, R. T., quick-cook sulphite process, (P.), B., 48.

Ulloth, R. See Jellinek, K.

Ulrich, F., and Katber, K., determination of phenols in crude ammonia liquor at coking plants and gasworks, B., 306.

Ulrich, F., and Zachariasen, W., crystal structure of α - and β -cadmium sulphide and wurtzite, A., 664.

Ulrich, F. See also Goldschmidt, V. M., and Zeche M. Stinnes.

Ultee, A. J., latex, A., 1066.

Ulzer, F. See Gottfried, S.

Umben, H., and Wülfing, J. A. ton, calcium preparation [calcium sodium lactate], (P.), B., 108.

Umino, S., specific heat of carbon steels, B., 920.

Umnova, (Mile) A. See Favorski, A. E.

Umpelby, F., gas generators, (P.), B., 907.

Underfed Stoker Co., and Wood, W. R., furnaces for burning pulverised fuel, (P.), B., 2.

Underhill, F. P. See Tyler, M.

Underwood, H. W., and Kochmann, E. L., reactions of ethyl aminocinnamates with bromine, A., 287.

Underwood, J. E., apparatus for the direct determination of carbon dioxide, B., 977.

Ungar, A. See Tröger, J.

Unger, E. See Siebert, W.

Unger, H. See Rosenbauer, E.

Unger, J. S., ammonia distillation, (P.), B., 707.

Unger, M., refractories for induction furnaces, B., 952.

Unger, M., and General Electric Co., electric furnace, (P.), B., 134.

induction furnace; furnace crucible, (P.), B., 886.

Unger, N. A., explosive, (P.), B., 142*.

Ungerer, E., precipitates with a stratified structure, A., 904.

Union Carbide and Carbon Research Laboratories. See Fuller, H. C.

Union de Consommateurs de Produits Métallurgiques & Industriels, cast-iron low in phosphorus, (P.), B., 245.

Union Oil Co. of California. See Frizzell, De R., and Rebber, L. L.

Union Sulphur Co. See Marx, C., and Wilkinson, H. H.

United Alkali Co., Ltd. See Dodd, H., and Lamble, A.

United Alloy Steel Corporation. See Charls, G. H., and Hay, J. T.

United Frit Co. See Eiselein, G. J., jun.

United Glass Bottle Manufacturers, Ltd., and Pryor, E. A. C., annealing furnaces, B., 1014.

United Products Corporation of America. See Bassett, H. P.

United States Bureau of Standards, Government master specification No. 59a for rubber goods; (methods of physical tests and chemical analyses), B., 68.

Government master specification for shellac varnish, B., 450, 501.

abridged volume correction table for petroleum oils, B., 475.

temperature corrections to readings of Baumé hydrometers; Baumé scale for sugar solutions (standard at 20°), B., 560.

United States Glue Co. See Luscher, H. W.

United States Industrial Alcohol Co. See Clapp, E. L., Cochrane, W. F., Graham, W. F., Lehr, J. W., Rodebush, W. H., Steffens, J. A., and Wilkie, H. F.

United States Industrial Contracting Co. See Fulwiler, W. H.

United States Metals Refining Co., and Marks, A., [magnesite] refractories, (P.), B., 586.

United States Processes Co., Inc. See Stokes, W. E.

United States Public Health Service, report of Surgeon-General's committee on lead tetracyl, B., 260.

United States Radium Corporation. See Hess, V. F.

United States Smelting, Refining, & Mining Co. See Cullen, J. F., and Mulligan, J. L.

United Verde Extension Mining Co. See Church, J. A., jun., and Prince, G. W.

United Water Softeners, Ltd., and Jones, J. F., apparatus for treating liquids and particularly for softening water, (P.), B., 1030*.

United Water Softeners, Ltd. See also Harold, C. H. H., and Higgins, E. B.

Universal Oil Products Co., cracking process [blending], (P.), B., 525.

converting heavy hydrocarbons into light hydrocarbons, (P.), B., 733*.

Universal Oil Products Co. See also Dubbs, C. P., Egloff, G., and Morrell, J. C.

Universal Rubber Pavions (Manchester, 1923), Ltd., and Brown, A. E., bituminous mixtures for road construction, (P.), B., 276.

University Patents, Inc. See Zincker, T. F.

Unkel, S. R. See Krüger, M., and Naamli, Vennoots. Matechu Maats. tot Exploit. van Chem. Uitvindingen.

Unkovskaja, V. A., and Volova, E. D., coefficients of viscosity of certain pairs of isofluoride liquids, A., 571.

Unna, Z., adsorption of diastase, A., 976.

Unruh, E. R. See Haas, J.

Unsöld, A., magnitudes of the terms of spectral series, A., 550.

Unsöld, A. See also Sommerfeld, A.

Unthank, G. R. See Green, E. W.

Uppal, B. N., toxicity of organic compounds to spores of *Phytophthora colocasiae*, Rac, A., 975.

Upson, F. W. See Jensen, F. W., and Power, M. H.

Urano, S., high-test bleaching powder: calcium hypochlorite and basic calcium hypochlorite, B., 485.

Urasov, G. G., physico-chemical investigation of Borowitz refractory clay, B., 746.

Urbain, E., activated charcoal, (P.), B., 732.

absorbent charcoal, (P.), B., 779.

manufacture of charcoal, (P.), B., 1003.

Urban, H., spruce wood, B., 531.

Urban, K., and Elbogen, S., purification of sugar solutions, (P.), B., 380*.

Urbach & Co., preventing the adherence of zinc oxide crusts to the walls of the condenser, (P.), B., 711.

Urbach, E. E., recent researches on porcelain, B., 361.

Uuchs, J., preserving the pulverised condition of calcined soda during storage, (P.), B., 876.

Ure, S. G. M. See Hinchley, J. W.

Urey, H. C., structure of the hydrogen molecule ion, A., 333.

fields of force within atoms, A., 1078.

Urey, H. C. See also Bichowsky, F. R.

Urk, A. T. van, behaviour of nitrogen according to the law of corresponding states, A., 570.

Urk, A. T. van, Keesom, W. H., and Onnes, H. K., measurements of the surface tension of liquid helium, A., 568.

Urk, H. W. van, is enzyme action colloido-chemical? (investigation with pepsin), A., 201.

colorimetric determination of ferric iron in acid solution, A., 1116.

determination of the chlorine ion in water, B., 174.

Urqhart, A. R., and Williams, A. M., moisture relations of cotton; absorption of water by cottons of various origins, B., 186.

Ursom, W., Schütz, L., Taub, L., and Winthrop Chemical Co., barbituric acid derivative, (P.), B., 609.

Usher, F. L., nature of the interfacial layer between an aqueous and a non-aqueous phase, A., 20, 348*.

Vogt, E., and Kirchhof, L., smelting or heating furnace with firing of coal dust, (P.), B., 216*.
furnace fired with coal dust and like pulverulent fuel, (P.), B., 473.

Vogt, L. F., and Standard Chemical Co., process of making ferrovanadium, (P.), B., 96.

Vogt, L. F., See also Goetschins, D. M.

Vogther, H., determination of santonin in *Artemisia* species and in resins, B., 510.

Voigt, J., accurate characterisation of protective colloids and allied substances, A., 243.

Voigt, W., See Heinrich, F.

Voigländer, H., See Gewerkschaft Wallram Abt. Metallwerke.

Voisin, U. B., aluminocalcareous hydraulic cement, (P.), B., 129.
manufacture of aluminous cements, coloured or white, (P.), B., 543.

Voit, E., determination of protein nitrogen, A., 144.

Voit, K., uric acid in human sweat, A., 1168.

Volbert, F., See Ley, H.

Volkinger, H., See Kirrmann, A.

Vollmann, H., wetting power of solvents, and their behaviour on evaporation, B., 955.

Vollmann, H., See also L. G. Farbenind. A.-G., and Krünlein, G.

Vollmer, H., photoactivity. II. Influence of adrenaline on the photographic plate, A., 920.
photoactivity. I. Effect of cod-liver oil and other vitamin-containing substances on the photographic plate, A., 980.

photoactivity. IV. Specific colour-reaction of photoactive substances, A., 980.

Vollmer, H., and Lee, S., photoactivity. III. Effect of photoactive substances on the blood-sugar level, A., 866.

Vollmer, H., and Serebrijski, J., photoactivity. V. Relation between photographic and antirachitic activity, A., 1181.

Vollmund, E., See Van Slyke, D. D.

Vollstein, L. M., electrode potential of thallium, A., 803.

Volmar, photolysis of alcohols, A., 920.

Volmer, M., and Adhikari, G., growth and dissolution of crystals, A., 349.
detection and measurement of the diffusion of adsorbed molecules on the surfaces of solid substances, A., 467.

Volmer, M., and Weber, A., formation of nuclei in supersaturated media, A., 676.

Volmer, M., See also Landt, E.

Volova, E. D., See Ukonvskaja, V. A.

Volquartz, K., See Brönsted, J. N.

Volwiler, E. H., See Adams, R.

Voudrak, J., See Stanek, V.

Voogd, M., See Scheffer, F. E. C.

Vorenbusch & Co., obtaining sulphur-free gases in distillation of coal, (P.), B., 862.

Vores, C. J., See Burrell, G. A.

Vores, C. L., Canter, V. C., Skoog, R. W., and Gasoline Recovery Corporation, absorption apparatus, (P.), B., 426.

Vorländer, D., assimilation hypothesis, A., 148.

Vorländer, D., and Görnandi, W., cyclopentanone in the distillation products of lignite, B., 906.

Vorländer, D., and Haberland, U., micro-determination of melting and transition temperatures, A., 112.

Vorländer, D., and Keesom, W. H., crystalline nitrogen, A., 1082.

Vorländer, D., and Klage, H., hexahydrophenylglycine-*o*-carboxylic acid, A., 1139.

Vorländer, D., and Kunze, K., compounds of *cylo*-hexanone with benzaldehyde, A., 1144.

Vorländer, D., and Walter, R., mechanically-enforced double refraction of amorphous liquids in relation to molecular configuration, A., 110.

Vorländer, F., See Akt.-Ges. für Anilin-Fab.

Vortmann, G., absence of mirror formation in Vortmann's method of separating silver and lead, A., 1019.

Vortmann, G., and Binder, F., use of uranous sulphate in volumetric analysis, A., 263.

Vortmann, G., and Hecht, O., separation of lead and silver, A., 202.

Vosburgh, W. C., Eppley unsaturated standard cells at high temperatures, A., 688.
temperature formula for the Weston standard cell, A., 688.

Vose, R. S., See Lewis, W. L.

Voskressenskaja, N., equilibrium in the system potassium oxalate-water, A., 898.

Vosnessenski, S., thermodynamic potential difference at the boundary of two liquid phases, III, A., 30.
thermodynamic potential difference between two liquid phases, A., 798*.

Vosnessenski, S., and Astachov, K., thermodynamic potential difference at the boundary of two liquid phases, III, A., 129.

Vosnessenski, S., Astachov, K., and Tschimutov, K., thermodynamic potential difference at the boundary of two liquid phases, IV, A., 688.

Vosnessenski, S., and Tschimutov, K., distribution of electrolytes between two liquid phases, A., 788.

Voss, A., See Farbw. vorm. Meister, Lucius, & Brüning.

Voss, H., after-treatment of artificial fibres and other products prepared from viscose or other cellulose compounds, B., 48.
manufacture of threads, films, etc. from viscose, (P.), B., 268.

Voss, W., See Straus, F.

Vossen, B., and Grasselli Dyestuff Corporation, brown trisazo-dyestuffs [for leather], (P.), B., 185.

Votček, E., and Burda, J., constituent sugars of some lichens, A., 501.

Votček, E., Etel, V., and Koppova, B., 2:4-dibromophenylhydrazine, the three iodophenylhydrazines, and their aldehydic and ketonic compounds, A., 501.

Votček, E., and Valentín, F., optical enantiomeric of natural rhamnose, A., 940.

Vourazos, A. C., bismuth amines and complexes, A., 371.
heterogeneous lead complexes; iodothiocyanates, A., 1015.

Vowler, J. N., See British Launderers' Research Assoc.

Vrably, V., See Zechmeister, J.

Vreeland, C. D., See Moore, W.

Vrklik, V. S., relation between the coefficient of expansion and compressibility of a fluid, A., 736.

Vřetek, A., See Frejka, J.

Vullemeier, E. A., Dickinson alcoholometer, B., 381.
relatively fine-grained deposits from "unsatisfactory" electrolytes, B., 951.

Vulcan Detinning Co., See Lahey, J. A., and McIlhenney, H. R.

Vulcan Louisville Smelting Co., See Van de Mark, W.

Vykypiel, F., See Donath, E.

Vyskocil, K., determination of water in sugar factory products by distillation with hydrocarbons, B., 560.

Waals, J. D. van der, jun., equilibrium in the capillary layer, A., 578.

Waché, E. A. E., manufacture of sodium sulphate and ammonium chloride, (P.), B., 127.
ammonium chloride and sodium sulphate, (P.), B., 237.

Wachholz, F., See Eggert, J.

Wachsztejski, J., See Zawadzki, J.

Wachtel, W., See Akt.-Ges. für chem. Prod. vorm. H. Scheidemandl, and Obersohn, A.

Wacker, A., Gesellschaft für Elektrochemische Industrie, and Gruber, W., purification of acetylene, (P.), B., 230.

Wacker, A., Gesellschaft für Elektrochemische Industrie, and Kanfler, F., procedure for combating plant diseases, (P.), B., 559.

Wacker, A., Gesellschaft für Elektrochemische Industrie G.m.b.H. See also Hörmann, L.

Wacker, L., See Liang, B.

Wada, I., behaviour of the urinary quotient C:N in adrenaline glycosuria, A., 753.
changes in the C:N quotient in alkaline urine containing sugar as a result of decomposition, A., 753.

effect of insulin on the urinary quotient C:N in normal rabbits, A., 700.

chemical constituents of tears, IV, A., 858.

influence of administration of active and inactive iron oxide on the C:N urinary quotient in rabbits, A., 1057.

effect of spaying, pregnancy, and administration of ovarian extracts on the urinary quotient C:N, A., 1064.

effect of administration of thyroid and pituitary gland preparations on the urinary quotient C:N, A., 1064.

Wada, I., and Ato, S., detection and separation of indium, A., 140*.

Wada, I., and Kato, S., separation of germanium, A., 377.

Wada, I., and Nakazono, T., separation of iridium from rhodium and platinum, and the separation of platinum and rhodium, A., 141.

Wada, I., See also Ato, S.

Waddell, S. S., See Deuel, H. J.

Wade, W. R., and New York Zinc Co., dehydrating minerals, (P.), B., 305*.

Wadeh, F., See Glimm, E.

Wadleigh, W. H., See Lindsay, D. C.

Wadsworth, J. M., and Pierce Petroleum Corporation, distilling oil, (P.), B., 352.

Wadsworth Watch Case Co. See Beebe, M. C., and Wise, E. M.

Waeser, B., production of magnesium carbonate with simultaneous recovery of ammonium salts, (P.), B., 915.

Wagapoff, G., See Pfälzische Chamotte & Thonwerke (Schiffer & Kircher) Akt.-Ges.

Wagenaar, M., microchemical reactions for oxalic acid, A., 853.
Deniges' reaction for citric acid, A., 1226.
detection of traces of nickel in hardened fats, B., 678.

Wagener, L. R., and McGill, W. J., electrometric titration of alkaloids; application of the quinhydrone electrode, A., 967.

Wagenfuhr, B., See Grimmer, W.

Wagemann, K., See Mansfeld-Akt.-Ges. für Bergbau & Hüttenbetrieb.

Wagner, A., influence of the blast-furnace temperature on the properties of pig-iron, B., 748.

Wagner, A., and Thomas, K., increasing the oxygen content of air blasts for use in metallurgical processes, (P.), B., 648.

Wagner, A., See also Cohn, E., and Frank, E.

Wagner, C., theory of molecular weight determinations in mixed solvents, A., 350.

Wagner, C., See also Fischer, F. G., and Tänel, K.

Wagner, H., process for dyeing woollen piece goods by means of direct dyestuffs without steaming, B., 122.
fastness of pigments to light and its determination in natural and artificial light, B., 166.

fastness of pigments to light, B., 247.
evaluation of [water-]paint adhesives, B., 638.

Wagner, H., Funke, A., and Grasselli Dyestuff Corporation, yellowish-red azo-dyestuffs, (P.), B., 910.

Wagner, H., and Keidel, E., chrome yellow problems, B., 500.

Wagner, J., See Arend, J. P., Gorr, G., Kubelka, V., and Neuberg, C.

Wagner, O., human fat, A., 1052.
determination of small quantities of halogens [chlorine in benzaldehyde] and sulphur [in mineral oils], B., 75.

Wahl, A. R., and Fairvel, T., dimethylisoindigotins and a new hydrolysis of disulphatisides, A., 73.
methylisoindigotins and methylindirubins, A., 960.

Wahl, A. R., and Lantz, R., sulphonic acids of the arylamine derivatives of naphthoquinones, A., 296.
new synthesis of phenylsinduline, B., 942.

Wahl, A. R., Lantz, R., and Société Anonyme des Matières Colorantes et Produits Chimiques de Saint-Denis, preparation of derivatives of naphthoquinone, (P.), B., 1007*.

Wahl, A. R., and Société Anonyme des Matières Colorantes et Produits Chimiques de Saint-Denis, separation of *o*-chlorotoluene and *p*-chlorotoluene, (P.), B., 817*.

Wahl, A. R., See also Lantz, R.

Wahl, H., See L. G. Farbenind. Akt.-Ges.

Wahl, H., motion of electrons in hydrogen and helium, A., 653.

Waihs Dove Bituminatic, Ltd., and Shaw, R., bituminous emulsions [containing blue clay], (P.), B., 919.

Wait, J. F., enclosed continuous filter, B., 243.

Waite, F. H., and Davey, G. W., gas producers, (P.), B., 39.

Wake, J. F., drying of road-making aggregates and other broken or granular materials, (P.), B., 392*.

Waksman, S. A., origin and nature of soil "humus." I. Introductory and historical, B., 892.
origin and nature of soil "humus." II. Method of determining humus in the soil, B., 958.
origin and nature of soil "humus." III. Nature of the substances contributing to formation of humus, B., 990.

Waksman, S. A., and Skinner, C. E., micro-organisms concerned in the decomposition of cellulose in the soil, B., 559.

Waksman, S. A., and Wolf & Co., J., concentrated enzymic substance, (P.), B., 211.

Waksman, S. A. See also Heukekian, H.

Wal, A. van der, manufacture of a remedy for foot-and-mouth disease, (P.), B., 341.

Walach, B. See Fischer, Hans.

Walbaum, H., natural musk, A., 810.

Walbaum, L. E., and Berthelsen, K., significance of metallic salts in the action of blood lipases, A., 202.

Walch, H., determination of the Kerr effect in liquefied gases; oxygen, A., 887.

Walczynska, J., dichlorothiophosphoryl chloride, A., 936.

Waldbauer, L. J. See Patton, F. J.

Walde, H., and Schuch, K. A., analytical control in permanganate manufacture, B., 319.

Walden, A. S., and National Carbon Co., calcining material [petroleum coke], (P.), B., 182.

Walden, F., Ulich, H., and Busch, O., conductivities in acetone, A., 1104.

Walden, F., Ulich, H., and Werner, O., [dielectric constants of solutions of electrolytes], A., 350.
[dielectric constants of liquids], A., 1193.

Waldmann, E. See Dziewolski, K.

Waldmüller, A. See Manchot, W.

Waldo, J. H. See Shonle, H. A.

Waldschmidt, E. See Felix, K.

Waldschmidt-Leitz, E., and Harteneck, A., specificity of animal proteases. III. Trypsin and chymotrypsin of the pancreas. IV. Spontaneous activation of trypsinogen, A., 323.

Waldschmidt-Leitz, E., and Schäffner, A., intestinal chymotrypsin, A., 323.

Waldschmidt-Leitz, E., Schäffner, A., and Grassmann, W., enzymic proteolysis. I. Structure of chymotrypsin, A., 1019.

Waldschmidt-Leitz, E., and Simons, E., enzymic proteolysis. II. Enzymic hydrolysis of casein, A., 1049.
III. Specificity of animal proteases. VI. Mode of action of pepsin, A., 1060.

Wales, H., choice of indicators for alkaloidal titrations, B., 461.

Wales, H., and Palkin, S., identification of phenols by means of the spectroscope. II., A., 515.

Wales, H. See also Palkin, S.

Walden, J. See Burkhardt, G. N., and Challenger, F.

Walker, A. J. See Chataway, F. D.

Walker, A. W. See Kendall, A. J.

Walker, C. L., nozzles for production of artificial filaments, (P.), B., 661.

Walker, E., I. Colour reaction for disulphides. II. Sulphydryl reaction of skin, A., 134.

Walker, E. E., manufacture of phenol-formaldehyde resins, (P.), B., 1021.

Walker, E. L., and Sweeney, M. A., chemotherapy of bacterial infections. I. Action of acriflavine, gentian-violet, and mercurochrome in experimental bacterial infections, A., 320.

Walker, G. E. See Walker, S., & Sons, Ltd.

Walker, J. C., and Doherty Research Co., breaking of [petroleum] oil-water emulsions, (P.), B., 941.

Walker, L. See Oberzimher, J.

Walker, M., and Marvin, C. J., determination of strength of liquid hydrocyanic acid by specific gravity, B., 271.

Walker, M., and Pacifico R. and H. Chemical Corporation, purification of hydrocyanic acid [from hydrogen sulphide], (P.), B., 360.
stabilisation of liquid hydrocyanic acid, (P.), B., 875.

Walker, N. H. See Brubaker, H. W.

Walker, O. J., action of phosphorus on salts of silver and other metals, A., 812.

Walker, S., & Sons, Ltd., and Walker, G. E., apparatus for treating artificial silk and other threads, (P.), B., 913*.

Walker, T. T. See Wheeler, A. S.

Walker, W., & Sons, Ltd. See Ross, H. C.

Walker, W. J., specific heat variations in relation to the dynamic action of gases and their equations of state, A., 15.

Wall, E. J., Comstock, D. F., and Kalmus, Comstock, & Wescott, dye composition [for treating photographic emulsions], (P.), B., 421.
treating photographic emulsion, and colour-sensitising composition, (P.), B., 421.

Wallace, G. H. See Palmer, H. F.

Wallace, G. W., apparatus for distilling oil, (P.), B., 40.
process of forming activated carbon, (P.), B., 85*.
cracking and hydrogenation of hydrocarbon oils, (P.), B., 779.

Wallace, J. H., and Fine Waste Products, Inc., preparation of wood for pulp manufacture, (P.), B., 48.

Wallace, W. M., recovery of soda from solutions [used in paper manufacture], (P.), B., 401.

Wallace & Tiernan Co., Inc., and Baker, J. C., process for bleaching flour, (P.), B., 607*.

Wallach, B. See Fischer, H.

Walle, H. van de, and Henne, A., stereoisomerides of chloroiodoethylene, A., 496.
action of bromine on chloroiodoethylene, A., 496.

Waller, I., Stark effect of the second order for hydrogen and the Rydberg correction for the spectra of helium and Li +, A., 987.

Wallerstein, A., digestibility of lichenin, A., 318.

Walls, E. S. See Jones, L. W.

Walls, N. S., and Wheeler, R. V., ignition of firedamp by momentary flames, I., B., 730.

Walmsley, H. P., conductivity of clouds dispersed from an arc, A., 651.

Walrath, J., alloy [for printing rollers], (P.), B., 984.

Walsh, K. L., production of gas by electrolysis, (P.), B., 677.

Wartenberg, R. G. See Merica, F. D.

Walter, B., perihelion rotation of the orbit of the radiating electron in hydrogen unlike atoms, A., 581.
attempt to affect artificially the rate of radioactive disintegration, A., 1190.

Walter, C. See Borsche, W.

Walter, C. M. See Lloyd, J. H.

Walter, H. See Verein für chem. Ind. Akte.-Ges.

Walter, J., use of soaps and colloids for the purification of brine, B., 582.

Walter, R., liquid mixed crystals, A., 17.
crystalline-liquid thallic salts of organic acids, A., 712.
method of making alloys, (P.), B., 18*.

Walter, R. See also Vorländer, D.

Walters, E. See Briers, F.

Walters, F. M., jun., regularities in the arc spectrum of cobalt, A., 1070.

Walters, J. E. See Loomis, A. G.

Walters, L. S., determination of naphthalene in gas, B., 731.

Walters, W., Kilgore, A. M., and Bollman, J. L., changes in the blood resulting from duodenal fistula, A., 637.

Walter, A. See Inge, L.

Walter, K., enzymes of the stomach of infants, A., 636.

Walter, R. von, and Benthin, G., thermal decomposition of lignite tar, B., 865.

Walter, R. von, and Bielenberg, W., removing creosote from tars and tar-oils by means of solid calcium hydroxide, B., 310.

Walter, R. von, and Steinbrecher, H., combustion of coal dust, B., 729.

Walter, R. von, Steinbrecher, H., and Bielenberg, W., working up lignite low-temperature tar without distillation, II., B., 310.

Walti, A. See Levene, P. A.

Walther, K., action of repeated doses of insulin, A., 1179.

Walton, C. F., jun. See Paine, H. S.

Walton, D. C., and Witherspoon, M. G., absorption of certain gases by the skin, A., 91.

Walton, D. C. See also Knight, H. C.

Walton, J. H., and Christensen, C. J., catalytic influence of ferric ions on the oxidation of ethyl alcohol by hydrogen peroxide, A., 918.

Wanderscheck, W., colour changes of beer during the primary fermentation, B., 929.

Wandsbeker Maschinenfabr. & Eisenbauanst. B. Fischer & C. Stelding. See Knapp, W.

Wang, H. Y. See Whitman, W. G.

Wankell, F., urine formation in the kidneys of frogs. VII. Excretion of non-electrolytes, A., 317.

Wann, F. B. See Hopkins, E. F.

Wanschmidt, A., coloured secondary fluorenyl halides and the synthesis of α -naphtho-derivatives of difluorenyl, A., 1230.

Want, D. van der, Bouman, M. P. J., and Naamli Venoots. Nederlandse Kunstzijdefabrik, manufacture of artificial products from viscose, (P.), B., 913*.

Waran, H. P., simple vacuum arc mercury still for laboratories, A., 932.

Warburg, O., tissue respiration, A., 190.
assimilation of carbon dioxide, A., 325.
effect of hydrogen cyanide on alcoholic fermentation, A., 431.
respiration theory and catalase, A., 633.
effect of ethylcarbylumine on the Pasteur reaction, A., 974.
oxidation of oxalic acid by iodic acid, A., 1011.
action of carbon monoxide on the metabolism of yeast, A., 1277.

Ward, A. L. See Essex, H.

Ward, A. M., Walden inversion. X. Reaction between water and the phenyl-chloroacetate and phenylbromoacetate ions, A., 805.

Ward, H. H., carbon products [pigments], (P.), B., 373.
producing carbon black for use in the manufacture of rubber and rubber goods, (P.), B., 796.

Ward, H. L., solubility relations of naphthalene, A., 1200.

Ward, T. J., effect of cellulose on arsenic determinations, A., 1018.

Wardlaw, H. S. H., and Dart, E. E. P., milk of Australian women, A., 1269.

Wardlaw, W., oxidising properties of sulphur dioxide, B., 664.

Wardlaw, W., and Harding, A. J. I., compounds of tervalent molybdenum. IV. Bromides, A., 812.

Ward-Love Pump Corporation. See Sweeney, O. R.

Ware, J. C. See Renshaw, R. R.

Wargöö Aktiebolaget, manufacture of iron-chromium alloys with low carbon content, (P.), B., 753.

Wargöö Aktiebolaget, and Lidholm, J. H., production of finely crystalline urea, (P.), B., 208.

Waring, C. E. See Evans, W. L.

Waring, H., apparatus for the manufacture of lead oxide, (P.), B., 744.

Waring, W. G., zinc compounds at high temperatures; [direct production of volatilised zinc oxide from sulphide ores], B., 95.

Warnat, K., constitution of boldine dimethyl ether with glaucine, A., 311.
yohimba alkaloids, A., 1263.

Warnat, K. See also Skita, A.

Warneford, F. H. S., and Hardy, F., manufacture of calcium citrate and citric acid from lime juice, B., 106.

Warner, E. C. See Poultin, E. P.

Warner, I., lime-burning process, (P.), B., 440*.

Warren, E. H. See Mills, W. H.

Warren, G. C., bituminous compositions, (P.), B., 276.

Warren, H. W. H. See British Thomson-Houston Co., Ltd.

Warrington, A. W. See Jeffrey, G. H.

Warszawska-Rytel (Mme.) Z. See Jabłczyński, K.

Wartenberg, H. von, thermochemistry of fluorine. II., A., 476.
[formation of ozone under pressure], A., 708.

Wartenberg, H. von [with Manthey, E., and Conzelmann, W.], anode-effect in the electrolysis of fused salts, A., 912.

Wartenberg, H. von, and Fitzner, O., thermochemistry of fluorine. I., A., 476.

Wartenberg, H. von, and Lerner-Steinberg, R., isothermal calorimetry, A., 909.

Wartenberg, H. von, and Treppenhauer, M., formation of ozone from air under pressure, A., 260.
ozoneization with high-frequency current, A., 260.

Wartenberg, H. von. See also Starke, A.

Warth, E. J., Singh, L., and Husein, S. M., nutrients required for milk production with Indian foodstuffs, B., 993*.

Wasastjerna, J. A., crystalline structure of anhydrite, A., 1195.

Waser, E., phenylalanine series. VI. Decarboxylation of tyrosine and leucine, A., 65.

Waser, E., Labouchère, A., and Sommer, H., phenylalanine series. VII. Synthesis of $I-3:4:5$ -trihydroxyphenylalanine, A., 67.

Washburn, F. W., method of estimating atomic weights with the aid of the periodic law, A., 1075.

Washington, H. S., Aurousseau, M., and Keyes, (Miss) M. G., lavas of Etna, A., 1223.

Washington, H. S., and Keyes, (Miss) M. G., rocks from eastern China, A., 710.

Washington Chemical Co., Ltd., and Newall, G. S., preventing or quenching explosions or fires in mines and other places, (P.), B., 566.

Wasicky, R., Lasch, F., and Schönovski, K., valuation of digitalis, B., 339.

Wasley, T. J. J., and Sibilla, F. G., system of combustion, (P.), B., 42*.

Wasson, E. See Ehrenhaft, F.

Wasteney, H. See Borsook, H.

Wasti, H. See Berczelier, L.

Watanabe, M., influence of general administration of acids, alkalis, and alkaline mineral waters on the $O:N$ ratio, A., 639.

Watanabe, S. See Tadokoro, T.

Watson, M., [ceramic bodies for] ignition-plugs, B., 51.

Watel, P. See Deriveau, P.

Waterhouse, G. B. See Cameron, A. E.

Waterman, H. C. See Lopper, H. A.

Waterman, H. I., refining of mineral oils, B., 259.

Waterman, H. I., and Blaauw, A. F. H., liquid reaction products obtained by action of hydrogen on paraffin wax under high pressure at 450° , B., 307.

Waterman, H. I., and Danviller, A., determination of the filtration constants of various charcoals, B., 967.

Waterman, H. I., and Gentil, A. J., crystallisation of sucrose solutions, B., 764.

Waterman, H. I., and Perquin, J. N. J., Edelcanu process [of petroleum refining], B., 269.

decomposition of cellulose under pressure, with and without a liquid medium and an atmosphere of hydrogen, B., 974.

Waterman, H. I., and Rijks, H. J., distillation of coconut oil at very low pressures, B., 409.

Waterman, R. E. See Honan, E. M., and Williams, R. B.

Waters, M. F. See Smith Separator Co.

Watars, W. A. See Scarborough, H. A.

Watkins, H. R., and Palkin, S., suitability of chloroform for alkaloidal assay, B., 848.

automatic devices for extracting alkaloidal solutions. II. Application to nux vomica and belladonna alkaloids, B., 963.

Watson, A. F., and Langstaff, E., preparation and properties of purified diphtheria toxoid, A., 979.

Watson, C. S. See Garland, C. S.

Watson, H. E., and Rajagopalan, M., reaction between sodium sulphite and sulphur, A., 303.

Watson, H. E. See also Jatkar, S. K. K., Patel, C. K., and Sudborough, J. J.

Watson, H. L., properties of fused quartz and other forms of silicon dioxide, B., 823.

Watson, J. A. See Daniels, S.

Watson, W. W., origin of the satellites in the ultra-violet OII bands, A., 222.

half-integral vibrational quantum numbers in the magnesium hydride bands, A., 655.

spectrum of lithium hydride, A., 1079.

Watson, W. W., and Rudnick, P., magnesium hydride band spectrum, A., 657, 1079.

Wattencamp, L. G. F. A., white liquid paste for paper and cardboard, (P.), B., 188*.

Wattiez, N., presence of β -methylglucoside and of scabioside in *Dipsacus arvensis*, A., 983.

Watts, G. See Denham, H. J.

Watts, H. G. See Bowen, E. J.

Watts, J. S. See Rider, D.

Waverly Oil Works Co. See Babb, J. E.

Wayne, T. B., absorption spectra of refinery products and the decolorising efficiency of bone char, B., 894.

Wayne, W. P. See Moor, W. C.

Wearn, J. T., and Richards, A. N., concentration of chlorides in glomerular urine of frogs, A., 195.

determination of minute amounts of urea, A., 327.

composition of glomerular urine, A., 1053.

Weatherby, L. S., and Chesny, H. H., reagent and standard for borax, B., 820.

Weathers, A. T., and Sweeney, H. C., uric acid levels in the blood of man and animals, A., 866.

Weaver, J. L., apparatus for wood distillation, (P.), B., 5.

Weaver, V. M., making graphite, (P.), B., 440.

Webb, H. W. See Elliott, G. A.

Webb, T. J., free energy of hydration of ions, A., 1008.

thermodynamic properties of electrolytes in acetic acid and in liquid ammonia, A., 1102.

free energy of hydration of ions and the electrostriction of the solvent, A., 1208.

Webb, W. R., and Carbide and Carbon Chemicals Corporation, making alkyl chlorides, (P.), B., 77.

Webb, W. R., and Eastman Kodak Co., cellulose ether film, (P.), B., 580.

reducing the viscosity characteristics of nitrocellulose, (P.), B., 975.

Webb, W. R., Malm, C. J., and Eastman Kodak Co., process of making cellulose acetate, (P.), B., 783.

Webber, H. O'K., relative merits of mono-, di-, and tri-calcium phosphates as soil fertilisers, B., 892.

Weber, A. See Volmer, M.

Weber, C. See Gordon, A. R.

Weber, C. J., Briggs, A. P., and Doisy, E. A., formation of lactic acid by depancreatised dogs, A., 426.

Weber, F., determination of extractive nitrogen, A., 441.

Weber, F. See also Chem. Fabr. Griesheim-Elektron, and Strugger, S.

Weber, G. See Kremann, R.

Weber, H. See Akt.-Ges. for Anilin-Fabr., and Willstätter, R.

Weber, H. C., and Hershey, R. L., practical applications of the Lewis filtration equation, B., 423.

Weber, H. C. and Nilsson, K. T., absorption of gases in milk of lime, B., 977.

Weber, H. C. See also Clark, G. L.

Weber, H. W., Schleifarth, A. O., and Russell Engineering Co., tunnel kiln, (P.), B., 543.

Weber, I. E., Laporte, B., Ltd., and Alcock, H. E., treatment of barium peroxide for obtaining hydrogen peroxide and an improved blanc fixe, (P.), B., 666.

Weber, J., and Krane, W., ashing of physiological material, A., 1284.

Weber, J. See also Goldschmidt, T., Akt.-Ges.

Weber, L., manufacture of briquettes from coke smalls or the smalls of other lean fuels, (P.), B., 12*.

Weber, L. E., antioxidants and their retarding action in the deterioration of rubber, B., 925.

Webster, D. L., and Ross, P. A., Compton effect with hard X-rays, A., 1187.

Webster, R. See Blair, Campbell, & McLean, Ltd.

Webster, T. A. See Rosenheim, O.

Webster, W. L., magnetic properties of single crystals of iron, A., 665.

Wecker, J. See Sauerwald, F.

Wedekind, E., isomerism in compounds containing two similar asymmetric sulphur atoms, A., 146.

Wedekind, E., and Albrecht, W., differentiation of the various types of ferric oxide and hydrated ferric oxide by their differing magnetic properties. I., A., 1196.

Wedekind, E., and Krecke, R., constituents of the corn-cockle seed. I. Githogenin, the "endsapogenin" of *Agrostemma githago*, A., 982.

Wede Meyer, O., influence of prolonged heating on the crystallisation of combined carbon in cast-iron, B., 544.

Weed, J. M., and General Electric Co., [operating an] induction furnace, (P.), B., 886.

Weed, J. M. See also British Thomson-Houston Co.

Weeks, E. G., and Merz & McLellan, cement manufacture, (P.), B., 825*.

Weeks, E. G. See also Merz & McLellan.

Weeks, E. J., lead dihydride and lead tetrahydride, A., 137.

reliability of vacuum analysis for solid metallic hydrides, A., 139.

tin dihydride and tin tetrahydride, A., 369.

Weeks, E. J., and Druse, J. G. F., solid hydrides of arsenic, antimony, and bismuth, A., 36.

Weeks, E. J. See also Druse, J. G. F.

Weeks, F. W. See Know Mill Printing Co., Ltd.

Weenert, F. See Anvers, K. von.

Weese, H. See Forst, A. W.

Weesner, C. W. See Graffon, H. T.

Wegener, B., [use of] "aktivin" in [textile] printing, B., 662.

Wegscheider, R., photochemical kinetics, A., 135.

Wehling, H. See Hütting, G. F.

Wehner, C., formation of citric acid from gluconic acid by moulds, A., 147.

biochemical decomposition of carbon monoxide, A., 759.

Wehnelt, A., and Seiliger, S., emission of electrons and positive ions at the m. p. of metals, A., 938.

Wehr, R. See Dimroth, O.

Wehrli, W. See Karrer, P.

Weichsfelder, T., and Thiede, B., hydrides of nickel, cobalt, iron, and chromium, A., 372.

Weide, H., and Bichowsky, F. R., effusion of gases, A., 1199.

Weidemann, G., unsaponifiable fraction of fish oil, A., 980.

Weidental, H. G., and Herron, J. H., Co., [iron-chromium] alloy, (P.), B., 763.

Weiderpass, N., and Kogerman, P., utilisation of phenoxides from shale oil for wood preservation, B., 747.

Weidling, H. See Sabalschka, T.

Weidmann, H., and Allied Process Corporation, recovering lithium salts from phosphate minerals containing lithium, (P.), B., 708*.

Weidmann, H. See also Metallbank & Metallurgische Ges. Akt.-Ges.

Weigel, O., photo-chemical disintegration of realgar, A., 366.

Weigel, R. See Noyes, H. F.

Weigel, W. M., preparation and use of industrial special sands, B., 471.

Weigle, R. See Kliegl, A.

Weigert, F., photochemistry of photographic films, B., 109.

Weigert, F., and Brodmann, L., confirmation of the Einstein law of photo-chemical equivalence in a very simple photo-chemical reaction, A., 581*.

Weigert, J., present position and previous experience in regard to fermented manure preparations, B., 457.

Weil, H., production of dibalogenidphenylmethanedicarboxylic acids, (P.), B., 8.

material for combating pests, (P.), B., 209.

Weil, R., temperature of paramorphic transformation of cristobalite, A., 665.

Weiland, H. See Benrather, A.

Weiman, R. A., and Langmuir, I., arc welding with atomic hydrogen, B., 550.

Weimann, P. P. von, colloidal sugar, A., 121.

sulphur solutions of all colours of the spectrum, A., 469.

dispersoidiological investigations. IX. Ability of thiocyanates and halides of alkaline-earth metals to produce dispersion of cellulose, A., 576.

Thomas Graham's characterisation of the colloid state, A., 791.

dispersoid synthesis of gold. III, A., 792.

colloidal gold, A., 902.

general method for bringing fibroin, chitin, casein, etc., into a plastic state and into colloidal solution, A., 1203.

Weimann, P. P. von, and Aoki, K., dispersoidiological investigations. VI. Cellulose dispersion in concentrated aqueous solutions of strontium thiocyanate, bromide, and chloride, A., 576.

Weimann, P. P. von, and Hagiwara, T., non-existence of the amorphous state, A., 338.

Weimann, P. P. von, and Hori, H., dispersoidiological investigations. X. Cellulose dispersion in aqueous sodium citrate and calcium chloride solutions of extremely low concentrations, A., 676.

Weimann, P. P. von, and Kataoka, S., dispersoidiological investigations. VII. Cellulose dispersion in concentrated aqueous solutions of barium thiocyanate and bromide, A., 576.

Weimann, P. P. von, and Otsuka, S., dispersoidiological investigations. VIII. Cellulose dispersion in concentrated aqueous solutions of calcium bromide and chloride, A., 576.

Weimann, P. P. von, and Utzino, S., action of electrolytes on the stability of dispers sulphur solutions prepared by the mechanical method, A., 23.

Wein, L., detection of carbon monoxide in fire-damp, combustion gases, and after-damp, B., 225.

Weinand, C. See Duisberg, W.

Weinberger, M. F. See Kozak, J.

Weindel, A., and Zeché M. Stünnes, purification of crude ammoniacal liquors, (P.), B., 238*.

Weindel, A. See also Welter, A., and Zeché M. Stünnes.

Weinfurthner, F. See Littner, H.

Weingand, R. See Czapek, E., and Wolff & Co.

Weingarten, A., sensitising kinematograph films for positive copies by means of solutions of dichromate, (P.), B., 171.

Weinland, E., body-content of the hedgehog during hibernation, A., 87.

Weinland, R., Babel, A., Gross, K., and Mai, H., compounds of molybdcic acid, tungstic acid, and quinquevalent molybdenum with polyhydric phenols and phenolic acids, A., 397.

Weinland, R., and Engel, L., complex formato- [and benzoato]-ferric-bases containing pyridine; formatoferro chloride and bromide, A., 198.

Weinland, R., and Hörn, A., compounds containing ferric acetato- or propionato-complexes, A., 711.

Weinland, R., Lang, I., and Fikentscher, H., fluoro-salts of aluminium and of tervalent iron and chromium, A., 136.

Weinland, R., and Loebich, O., ferric salts of malonic and substituted acetic acids and their constitution, A., 499.

Weinland, R., and Maier, M., pyrocatechol and pyrogallol compounds with stannic acid, A., 398.

Weinland, R., and Schlaich, H., acetato- and formato-cations of cadmium, manganese, lead, and the alkaline earth metals, A., 146.

Weinland, R., and Spel, H., pyrocatechol compounds of bi-, ter-, and quadrivalent metals, A., 165.

Weinland, R., and Stark, A., complexes of formic acid and thorium; aluminium and manganese formates, A., 498.

Weinstock, M. See Hess, A. F.

Weintraub, E., and Société Alsacienne de Constructions Mécaniques, protective coatings for metallic surfaces, (P.), B., 245.

electrically insulating coating [on metal] affording protection against oxidation, (P.), B., 756.

Weir, A. A., data used in graph for beeswax, B., 418.

Weir, G. & J., Ltd., and Weir, J. G., utilisation of products of combustion in steam generators, (P.), B., 223.

Weir, H. G., and Prest-O-Lite Co., Inc., composition for storage-battery electrodes, (P.), B., 371.

Weir, H. M., and Standard Development Co., producing gasoline, (P.), B., 863.

Weir, J. G. See Weir, G. & J., Ltd.

Weir, J. W., process of manufacturing lubricating oils, (P.), B., 701.

refining lubricating-oil stocks, (P.), B., 701.

refining mineral lubricating oils, (P.), B., 780.

Weir, J. W., and Black, J. C., manufacturing lubricating oils, (P.), B., 117.

Weir, J. W. See also Black, J. C.

Weisbecker, H. See Kämmerer, H.

Weisbrod, K. See Müller, Ernst.

Weiser, H. B., antagonistic action of ions in the neutralisation of soils, A., 242.

influence of prolonged maintenance of nitrogen equilibrium on the growing animal, A., 862.

Weiskopf, C. H., and International Precipitation Co., apparatus for electrical precipitation of suspended material from gases, (P.), B., 177, 886.

Weismantel, J. See Braun, J. von.

Weiss, E., production of low-temperature tar, (P.), B., 39.

Weiss, H. See Ott, W.

Weiss, H. von, and Dörle, M., lipolytic power and the cholesterol content of the blood-serum of lactics, A., 753.

Weiss, H. von. See also Dörle, M.

Weiss, I., and Altai, M., mechanism of antiketogenic action, A., 642.

Weiss, J. M., incorporation of rubber in non-aqueous materials, (P.), B., 167.

Weiss, P., paramagnetism independent of temperature, A., 230.

Weiss, P., and Forrer, R., magnetisation and thermo-magnetic phenomenon of nickel, A., 339.

Weiss, R., horn-dissolving action of alkali sulphides, A., 749.

Weiss, R., Grobstein, K., and Sauermann, R., action of magnesium benzyl chloride on benzylidenephthalide, A., 401.

Weiss, R., and Sauermann, R., formation of 2-phenyl-3-arylidones from benzylidenephthalide, their hydrolysis to a new acid, and the preparation of a stereoisomeric benzylidenephthalide, A., 291.

Weiss, R., and Woidich, K., 1-phenylnaphthalene, A., 509.

Weiss, S. See Ernst, Z., Hatcher, R. A., Hetényi, S., and Holló, J.

Weiss, W. See Koenigs, E.

Weissenberger, R., crystal structure. I. Symmetrical grouping of discontinuous point distribution. II. Atom groups in crystals and their physical significance, A., 459.

crystal structure and chemical constitution, A., 781*.

geometrical principles of stereochemistry. I., A., 934.

Weissenberger, G., organic molecular compounds. XIX. Application of theory of residual field, A., 787.

gas-washing, B., 652.

Weissenberger, G., Baumgarten, S., and Henke, R., adsorption from viscous media by charcoal. II., A., 789.

Weissenberger, G., Henke, R., and Bregmann, L., organic molecular compounds. XVI. Dihydric phenols and their ethers, A., 466.

Weissenberger, G., Henke, R., and Katschinka, H., binary liquid mixtures. XX. Systems with substituted hydrophenanthrenes. XXI. Systems with butyric acid, A., 683.

Weissenberger, G., Henke, R., and Kawenoki, F., binary liquid mixtures. XXII. Systems with nitrobenzene and nitrophenols, A., 787.

Weissenberger, G., Henke, R., and Schuster, F., organic molecular compounds. XVIII. Calculation of molar fraction, A., 692.

Weissenberger, G., Henke, R., and Sperling, E., organic molecular compounds. XVII. Behaviour of decahydronaphthalene, A., 787.

new methods of washing gases. V. Investigations with the aid of absorption curves, B., 111.

Weissenberger, G., and Schuster, F., organic molecular compounds. X. Vapour-pressure curves, A., 465.

organic molecular compounds. XI. Dolezalek's theory, A., 465.

binary liquid mixtures. XXIII. Vapour pressure, A., 787.

Weissenberger, G., Schuster, F., and Henke, R., molecular compounds of the phenols. VIII. Localisation of the residual valency, A., 283.

organic molecular compounds. IX. The trichloromethyl group, A., 331.

Weissenberger, G., Schuster, F., and Lielacher, J., organic molecular compounds. XIV. Chlorophenols and bromoform. XV. Aromatic amines, A., 465.

Weissenberger, G., Schuster, F., and Pamer, H., organic molecular compounds. XII. Chloroacetic acids and pentachloroethane, A., 465.

organic molecular compounds. XIII. Calculation of vapour-pressure curves, A., 465.

Weissenberger, G., Schnster, F., and Piatti, L., residual valency of organic compounds, A., 458.

Weissenberger, G., Schuster, F., and Wojnow, K., molecular compounds of the phenols. VII. Behaviour of hydrogenated cresols and related compounds, A., 282.

Weissenberger, G., Schuster, F., and Zack, O., binary liquid mixtures, A., 570.

new methods of gas washing. IV. Absorption curves with mixed absorbents, B., 1.

Weisser, F. L. See Smith, G. W.

Weithöner, R. See Roth, G. A.-G.

Weitz, E., recognition and separation of mono- and poly-basic acids, A., 1006.

Weitz, E., and Fischer, K., free ammonium radicals. VI. Radicals and merquiinoid compounds. I. Dipyridinium subhalides, A., 527.

Weizel, W. See Trautz, M.

Weizmann, A. See Stadnikov, G. L.

Weizmann, C., and Blumenfeld, J., titanium pigments, (P.), B., 373.

preparation of [titanium oxide] pigments and paints, (P.), B., 889.

Weizmann, M. See Fodor, A.

Welch, E. E., dryers, mixers, screeners, and the like, (P.), B., 426*.

Welch, H. V., and International Precipitation Co., recovery of metals [copper, gold, silver] from their ores, (P.), B., 444.

Welch, I. M. See Appel, W. D.

Welch, J. B., apparatus for drying, etc., (P.), B., 567.

Welch, M. B. See Coombs, F. A.

Welter, W. A., Thomas, W. A., and Hektoen, L., urinary proteins; crystalline proteins of nephritis, A., 971.

Welles, J. H. See Rhodes, F. H.

Wellesley, R., [non-corrosive] alloys, (P.), B., 590.

Wellman, F. E., and Kansas City Gasoline Co., apparatus for distilling hydrocarbons, (P.), B., 431.

heating system for oil stills, (P.), B., 478.

apparatus for cracking hydrocarbons, (P.), B., 622.

method of heating [cracking] oil, (P.), B., 622.

Wellman-Seaver-Morgan Co. See Rogers, J. F.

Wells, H. G. See Lewis, J. H.

Wells, H. P., Mabey, H. M., and Rowland, J. M., transportation of liquefied chlorine gas, B., 486.

Wells, R. C., deposition of native copper from ascending solutions, A., 265.

Wells, R. L., deterioration of strong sodium hypochlorite solutions, B., 874.

Wells, S. D. See Rue, J. D.

Welo, L. A., photo-electric emission from platinum as influenced by heating, A., 876.

Wels, P., action of ethyl alcohol on the sensitivity of proteins towards electrolytes, A., 1058.

Welter, A., manufacture of high-percentage durable soap, (P.), B., 21*.

Welter, A., Welter, L., and Weindel, A., stabilising ammonium carbonate, bicarbonate, and carbamate, (P.), B., 487.

Welter, G., tensile strength of metals and alloys under a statical load, B., 546.

Welter, L. See Welter, A.

Welton, F. A. See Morris, V. H.

Welton, P. E., manufacture of fuel briquettes; manufacture of combustible briquettes, (P.), B., 181.

manufacture of fuel briquettes, (P.), B., 182, 232*.

Weltzin, W., swelling properties of [cellulose] artificial silks [in water and caustic alkalis] and their use for identification, B., 737.

Weltzin, W., Gerhardt, and Tobel, G. zum, comparison of the swelling in caustic soda of natural celluloses and artificial silk, B., 737.

Weltzin, W., and Tobel, G. zum, action of oxygen on alkali-cellulose, A., 821; B., 911.

Wemple, L. E., separating metal from metalliferous material, (P.), B., 444.

Wemple, L. E., and American Zinc, Lead, & Smelting Co., production of oxides and other compounds of zinc, lead, and the like, (P.), B., 755.

Wendehorst, E., ammonium selenide, A., 700.

Wendt, G. L., and Standard Oil Co., removal of sulphur and sulphur compounds from hydrocarbon-oil distillates, (P.), B., 814.

Wenfray, P., printing nitrosophenol dyestuffs [on fabrics], B., 706.

Wenke, H., and National Aniline & Chemical Co., azo-dyes containing a diphenylurea [diphenylcarbamide] nucleus, (P.), B., 866.

Wenner, W. F. See Swingle, W. W.

Wentworth, S. W. See Kraybill, H. R.

Wentworth-Shields, F. E., report on paint experiments, B., 888.

Wenzel, G., interpretation of the spectra of the alkaline-earths, A., 102.

multiple periodic systems in the quantum mechanics, A., 773.

difficulty in the theory of the rotating electron, A., 881.

Wenzell, E. See Windisch, W.

Wenzel, E. See Willstätter, R.

Wenzl, H., bleaching wood cellulose, B., 267.

use of reduction methods of analysis, particularly determination of the copper number, in determining bleaching damage, B., 269.

Wenzl, H. See also Chem. Fabr. Griesheim-Elektron.

Werthöfer Pflanzenfabr. P. Hillebrand, operating spinning machines for artificial silk, (P.), B., 660.

Werner, D., simple method of obtaining the size distribution of particles in soils and precipitates, B., 31.

Werner, H. See Schmalzfuß, H.

Werner, K., magnesia cement, (P.), B., 91.

Werner, M., rate of dissolution of aluminium in hydrochloric acid, B., 750.

Werner, O. See Klein, G., and Walden, P.

Werner, S., spark spectrum of lithium, A., 874.

Werner, W., and Keesom, W. H., variation of the dielectric constant of liquid and solid hydrogen with temperature, A., 559.

variation of the dielectric constant of liquid oxygen with temperature, A., 661.

Wernicke, R., and Modern, F., reactions of colloidal gold with proteins, A., 1005.

electroanalysis of antitoxic sera; precipitation of active globulins, A., 1268.

Werthan, S. See Nelson, H. A.

Wertheim, E., reactions of carbon disulphide. I., A., 497.

Wertheimer, E., antoxidative system as an example of catalysis by heavy metals, A., 582.

relation between the temperature and energy of a gas, A., 1083.

Wescott, B. B., and Engelder, C. J., catalytic decomposition of formic acid, A., 693.

Wesenberg, G., tetanus toxin and its destruction, B., 897.

Wesenberg, G. See also Taub, L.

Wessel, W., detection of magnetic moment of the nucleus by α -particle deflections, A., 220.

Wessely, F., and Sigmund, F., α -amino- N -carboxylic anhydrides. III. High molecular compounds, A., 1235.

Wessely, F. See also Sigmund, F.

Wesson, D., cotton seed and its products [during the past fifty years], B., 837*.

West, E. See West, F. J.

West, E. S., condensation products of ethyl acetoacetate. I. New compound of glyoxal and ethyl acetoacetate, ethyl formylmethylethylenebisacetoacetate, A., 49.

condensation products of ethyl acetoacetate. II. Oxidation and possible relationship to antiketogenesis in the animal body, A., 198.

West, E. S. See also Lipman, C. B.

West, F. J., West, E., and West's Gas Improvement Co., Ltd., coke extractors for vertical retorts, (P.), B., 655*.

West, G. H. See Pike, R. D.

West, H. See Robinson, R.

West, J. See Bragg, W. L.

West, L. E. See Fiske, C. H.

West, R., and Benedict, E. M., influence of ethyl α -hydroxystearate on acidosis, A., 196.

West, R. See also Benedict, E. M.

West, W. See Kendall, J.

West End Chemical Co. See Lowry, M. V.

West Virginia Pulp & Paper Co., and Drewsen, V., manufacture of cellulose from resinous woods, (P.), B., 739.

manufacture of fibrous material from straw, (P.), B., 739.

West Virginia Pulp & Paper Co. See also Drewsen, V., and Statham, N.

Westberg, S., refining metals, (P.), B., 674.

Westenberger, J. See Lorenz, R.

Westenbrink, H. G. K. See Jaeger, F. M., and Terpstra, P.

Westendorf, F. See Tammann, G.

Western Electric Co., Inc., producing and working metallic compositions containing large proportions of nickel, (P.), B., 17.

magnetic structures and method of manufacture thereof, (P.), B., 61.

[evacuating] electric discharge devices, (P.), B., 98.

materials [iron-nickel alloys], (P.), B., 244.

alloys and alloy articles, (P.), B., 412.

flame-proof insulating material, (P.), B., 676.

Western Electric Co., Inc. See also Bellamy, H. T., Boving, H., Harris, J. E., Kingsbury, E. F., Nicolson, A. M., Reeve, H. T., Speed, J. B., and White, J. H.

Western Industries Co. See Crowell, R. B.

Western Metallurgical Co. See Knight, A. P.

Westfälische Stahnges. Osseberg & Co., treatment, especially melting, of metals, (P.), B., 64.

Westgarth, G. C. See Haworth, W. N.

Westgren, A., and Phragmén, G., chemistry of metal systems [copper or silver with zinc, aluminium, or tin], A., 1084.

X-ray analysis of the systems tungsten-carbon and molybdenum-carbon, A., 1084.

Westinghouse Electric and Manufacturing Co., apparatus for testing the viscosity of fusible materials [shellac], (P.), B., 681*.

Westinghouse Electric and Manufacturing Co. See also Alcinit, C. T., Brace, P. H., Cole, G. H., Cornell, E., jun., Maude, A. H., and Rodman, C. J.

Westinghouse Lamp Co., production and treatment of refractory metals [chromium], (P.), B., 984.

Westinghouse Lamp Co., and Marden, J. W., manufacture of uranium, (P.), B., 635.

Westinghouse Lamp Co., Marden, J. W., and Rich, M. N., manufacture of metals of the cerium group of rare-earth metals in the form of thin regular pieces, (P.), B., 884.

Westinghouse Lamp Co., Rentschler, H. C., and Marden, J. W., high-frequency electric furnaces, (P.), B., 497.

Westinghouse Lamp Co. See also Compton, A. H., Gero, W. B., Gustin, D. S., Lederer, A., Marden, J. W., Myers, R. E., Richardson, H. K., Sproesser, W. C., and Whitmore, J. B.

Westinghouse Union Battery Co. See Norris, P. E.

Westman, A. E. R., mercury balance for measuring the bulk volume of bricks, B., 632.

Westman, A. E. R., and Pfeiffer, W. H., comparison of the uniformity of strength and texture of firebrick made by different processes, B., 917.

Westman, A. E. R. See also Parmelee, C. W.

Westman, E. B., Ltd. See Rhodin, J. G. A.

Westmont, O. B. See Hartmann, M. L.

Weston, F. R., flame spectra of carbon monoxide and water gas. II., A., 8.

Weston, F. R. See also Bone, W. A.

Weston, R. S., water supply and sewerage during the past fifty years, B., 851*.

Westphal, K. See Windaus, A.

Westrip, G. M. See Cray, F. M.

Westrum, L. S. van, bituminous binding materials, (P.), B., 11.

binding together blocks for pavements, roads, and the like, (P.), B., 363.

West's Gas Improvement Co., Ltd. See West, F. J.

Weberbee, H. E., producing iron coke, (P.), B., 633.

Wetternik, L. See Fromm, E.

Wetzel, A., physical properties of porcelain, B., 323.

Wever, F., constitution of iron, B., 15.

high-frequency induction furnaces, B., 549.

Wever, F., [with Giani, P., and Reinecke, W.], recurrent transition curves in anisotropic binary systems, A., 908.

Wever, F., and Reinecke, W., system iron-tin, A., 475.

Weyenberg, E. van, and Courtaulds, Ltd., preparation of alkali cellulose, (P.), B., 153*.

Weyenberg, E. van. See also Courtaulds, Ltd.

Weygand, C., development of organic analysis from Lavoisier to Pregl, A., 314.

[simplest α -alkyl ethers of benzylacetone], A., 1248.

Weygand, C., and Forkel, H., salt formation from 1:3-diketones. I. Beryllium and aluminium salts of 5:5-dimethylcyclohexane-1:3-dione, A., 1249.

Weygand, C., and Hennig, H., isomeric relationships in the chalcone series. IV. β -Ethoxychalcone [phenyl β -ethoxystyryl ketone], A., 1248.

Weygand, C., and Matthes, A., β -methylchalcone [β -tolylstyryl ketone]; isomerism of the α -cinnamic acids, A., 1041.

isomeric relationships in the chalcone series. III. Addition of bromine and aniline to substituted chalcones, A., 1248.

Weyl, A. See Siemens & Halske A.-G.

Weyland, H. See Farbenfabr. vorm. F. Bayer & Co., and I. G. Farbenind. A.-G.

Weyman, G., examination and evaluation of coals for carbonising purposes, B., 303.

Whatmough, W. A., equilibrium boiling points of motor fuels, B., 181.

relation between fuel deposition temperature and equilibrium boiling point, B., 653.

Wheaton, H. J., and American Doucile Co., base-exchange silicate, (P.), B., 631*.

Wheeler, A. S., and Jennings, E. de W., action of amines on di- and tri-chloroacetic acids, A., 161.

Wheeler, A. S., and Harris, C. R., bornol in spruce turpentine, A., 72*.

Wheeler, A. S., and Walker, T. T., 4-m-nitrophenylsemicarbazide and certain derivatives, A., 62.

Wheeler, R. V., electric ignition of firedamp: alternating and continuous currents compared, B., 426.

Wheeler, R. V. See also Burgess, M. J., Chapman, J. W. R., Coward, H. F., Francis, W., Greenwald, H. P., Legg, V. H., Maxwell, G. B., Naylor, C. A., Payman, W., Rice, G. S., and Walls, N. S.

Wheetling, L. C., influence of hydration on the stability of colloidal solutions of soils, B., 102*.

Wherry, E. T., and Buchanan, R., composition of the ash of Spanish moss, A., 1280.

Wherry, E. T. See also Larsen, E. S.

Whetzel, J. C. See Porter, R.

Whitaker, J., and Whitaker, R., machines for dyeing, scouring, and washing wool and other fibrous materials, (P.), B., 357*.

Whitaker, R. See Whitaker, J.

Whitby, G. S., fatty acid derivatives, A., 819.

Whitby, G. S., and Chataway, H. D., action of sulphur on linseed oil, B., 551.

Whitby, G. S., Dolid, J., and Yorston, F. H., resin of *Hevea* rubber, A., 841.

Whitby, G. S., and Jane, R. S., reaction between caoutchouc and sulphur, B., 682.

Whitcomb, W. O., and Lewis, J. P., commercial protein test on wheat and some of its problems, B., 1026.

White, A. C., insulin and blood-fat, A., 205.

White, A. G. See Rintoul, W.

White, A. H., Alexander, J. E., and Goodell, E. G., reducing sulphates and the like, (P.), B., 126.

regenerating black liquor [from sulphate cellulose manufacture], (P.), B., 580.

White, A. M. See Randall, M.

White, C., vacuum pan [for grainning sugar], (P.), B., 72.

White, C. See also Bergmann, M.

White, F. D., and Cameron, A. T., action of parathyroid extracts on guanidine, A., 1180.

White, G. N. See Carpenter, S. W., and Goodwin, C. J.

White, H. E. See Gibbs, R. C.

White, H. T., Smith, D. J., and Clayton, R. F., gas producers, (P.), B., 654.

White, J. H., and Western Electric Co., casting metals [nickel-iron alloys], (P.), B., 635*.

White, J. W., and Holben, F. J., residual effects of 10 years' continuous manorial treatments. II. Effect of quicklime on soil treated with dung, B., 25.

residual effects of 40 years' continuous manorial treatment. III. Ultimate fate and some physical and chemical effects of applied lime, B., 800.

White, M. W., energy of high-velocity electrons, A., 989.

White, W. A. See Comyn, B. D.

White, W. C. D. See Brown, F. E.

White, W. P., two rapid and accurate methods in calorimetry, A., 686.

white covers for calorimeter jackets, A., 706.

Whitecross Co., Ltd. See Lloyd, H. D.

Whitehead, H. R. See Gordon, J.

Whitehead, T., "finger and toe" disease of swedes; [composition of swedes] B., 847.

Whitehouse, A. G. R., heat of adsorption of gases by coal and charcoal, B., 145.

Whitley, J. H., function of ferric oxide in acid and basic open-hearth slags, B., 367*.

ghost lines and the banded structure of rolled and forged mild steels, B., 491, 883*.

Whiteman, D., reproduction of yeast in solutions to which no bios had been added, A., 324.

Whitford, E. L., decomposition of oxalic acid by acetic anhydride, A., 146.

gasometric method for the determination of acetic anhydride, A., 189.

Whiting, A. L., and Richmond, T. E., sweet clover in relation to the accumulation, loss, and conservation of nitrates in soil, B., 799.

composition of biennial white sweet clover as related to soil enrichment, B., 892.

Whitlock, L. E., cleansing and disinfecting compounds, (P.), B., 1030*.

Whitman, W. G., elimination of salt from sea-water ice, A., 358.

corrosion of iron, B., 282*.

Whitman, W. G., and Chappell, E. L., corrosion of steels in the atmosphere, B., 546.

Whitman, W. G., and Davis, G. H. B., hydration of lime, B., 272.

Whitman, W. G., Long, L. jun., and Wang, H. Y., absorption of gases by a liquid drop, B., 423.

Whitman, W. G. See also Fortsch, A. R.

Whitmore, F. C., and Ehrenfeld, L., mercurisation of aromatic sulphonic acids, A., 531.

Whitmore, F. C., Hanson, E. R., and Leuck, G. T., mercurated hydroxyazobenzenes, A., 629.

Whitmore, F. C., and Woodward, G. E., *p*-chloromercuribenzoic acid and related compounds, A., 534.

Whitmore, J. See Davidson & Co., Ltd.

Whitmore, J. B., Ferguson, J. E., and Westinghouse Lamp Co., coating [electric] incandescent lamp bulbs, (P.), B., 498*.

Whitton, W. R. See British Thomson-Houston Co., Ltd.

Whiton, L. C., oil extraction in theory and practice, B., 677.

Whittaker, C. M. See Courtaulds, Ltd.

Whittaker, *H. F.*, Wollaston, *W.*, and Du Pont de Nemours & Co., *E. I.*, purification of α -nitronaphthalene, (P.), B., 575.

Whittelsey, *T.*, Bradley, *C. E.*, and Naugatuck Chemical Co., treating rubber and similar materials, (P.), B., 68.

Whitten, *J. L.* See Mehl, *R. F.*

Whitworth, *F. T.*, concentration of mineral ores by flotation, (P.), B., 755.

Whyte, *E. F.* See Kraus, *C. A.*

Whydaw-Grey, *R.* See Patterson, *R. S.*

Wibaut, *J. P.*, 1-methylpyrrolidine from 1-methylpyrrole by catalytic reduction, A., 177.

synthesis of 2-2-pyridylpyrrole, and the structure of the isomeric 2-pyridyl-pyrroles and of the corresponding α -nicotyrins, A., 1260.

manufacture of alkyl halides, (P.), B., 721*.

Wibaut, *J. P.*, and Dingemanse, *E.*, pyrogenic rearrangement of *N*-methyl-2-(2-pyridyl)pyrrole, A., 1260.

Wible, *C. L.*, comparison of methods of digitalis standardisation, B., 896.

Wick, *R. M.* See Clark, *G. L.*

Wickes, *J. W.*, apparatus for separating finely-divided solids from liquids; [thickeners], (P.), B., 857.

Wickinger'sche Portland-Cement & Wasserkalkwerke, and Andreas, *A.*, tube mills for grinding or crushing, (P.), B., 344, 775.

Widawski, *E.* See Sanerwald, *F.*

Widdington, *R.* See Breit, *G. F.*

Widdowson, *R. R.*, organo-silicon compounds, A., 827.

Widell, *H.* See Euler, *H. von.*

Widen, *P. J.* See Gustavson, *K. H.*

Widemann, *L.* See Eibner, *A.*

Widmann, *H.* See Glocker, *R.*

Widmer, *A.* See Karrer, *P.*

Widmer, *J. M.*, and Penick & Ford, Ltd., manufacture of conversion products of starch, (P.), B., 561.

manufacture of starch, (P.), B., 642.

Widmer, *J. M.* See Prncha, *M. J.*

Widmer, *R.* See Karrer, *P.*

Widmer, *W.* See Stauffer, *H.*

Wiechowski, *W.* See Chem. Fabr. "Norgine," Jableczynski, *K.*, and Langacker, *H.*

Wiedemann, *H.*, distillation plant for finely-divided material, (P.), B., 573.

Wiedemann, *O.* See Fischer, *Hans.*

Wiederhold, *H.* See Ehrenberg, *C.*

Wiederhold, *W.*, influence of the heat treatment of aluminium on its rate of dissolution in hydrochloric acid, B., 750.

influence of the thermal and mechanical treatment of aluminium on its resistance to corrosion, B., 330.

Wiederhold, *W.* See also Liebreich, *E.*

Wiedersheim, *B.* See Wiegand, *H.*

Wiegand, *E.* See Linke-Hofmann-Lauchhammer Akt.-Ges.

Wiegand, *F.* See Hefterich, *R.*

Wiegand, *W. B.*, manufacture of rubber compositions, (P.), B., 555.

is there a substitute for American carbon black [in rubber mixings]? B., 890.

Wiegner, *G.*, and Tuorial, *P.*, rapid coagulation of polydisperse systems, A., 242.

Wieland, *H.*, and Bergel, *F.*, [with Schwarz, *K.*, Schepp, *R.*, and Fukelmann, *L.*], dicyclopentanone, II., A., 56.

Wieland, *H.*, and Boehringer Sohn, *C. H.*, anaesthetic, (P.), B., 28*.

Wieland, *H.*, and Fischer, *F. G.*, occurrence of free radicals in chemical reactions. IV. Decomposition by iodine of silver salts of organic acids, A., 46.

mechanism of oxidative processes. X. Oxidative action of iodic acid and its restriction. XI. Catalytic dehydrogenation, A., 808.

Wieland, *H.*, Hoye, *H. von.*, and Börner, *K.*, occurrence of free radicals in chemical reactions. III., A., 61.

Wieland, *H.*, and Jacobi, *R.*, synthesis of β -cholestane from cholanic acid, A., 1139.

Wieland, *H.*, and Martz, *E.*, resin acids of hops. III., A., 1249.

Wieland, *H.*, and Schlichting, *O.*, [with Wiedersheim, *V.*], bile acids. XXIV. Separation of water with formation of neutral substances, A., 400.

Wieland, *H.* See also Schöpf, *C.*

Wiener, *H. J.* See Mueller, *E. F.*

Wiener, *O.*, "form" birefringence through absorption, A., 1032.

does the failure of X-ray examination to reveal crystalline nature exclude true birefringence? A., 1082.

Wiener, *R. von E.* See Mueller, *E. F.*

Wierners, *F.* See Auwers, *K. von.*

Wiernert, *F.* See Gewerkschaft Burbach.

Wieringa, *K. T.* See Söhnigen, *N. L.*

Wierzuchowski, *M.*, carbohydrate metabolism. I. Influence of insulin on levulose and dextrose administered intravenously, A., 979.

Wiesmann, *H.* See Lemmermann, *O.*

Wietzel, *G.* See Badische Anilin- & Soda-Fabrik, and L. G. Farbenind. Akt.-Ges.

Wietzel, *H.* See Badische Anilin- & Soda-Fabrik.

Wietzel, *R.* See Badische Anilin- & Soda-Fabrik.

Wightman, *W. A.*, spatial structure of cycloparaffins. II. Structure of 1:1-disubstituted cyclohexaues, A., 1238.

Wignall, *J. S.* See Hodgson, *H. H.*

Wijngaarden, *C. de L. van.*, strength of digitalis preparations. IV. Effect of alcohol, B., 710.

Wijnenbeek, *J. A.* See Laqueur, *E.*

Wikul, *M.*, determination of potassium, A., 491.

oximetric determination of tartaric acid in the presence of nitrite by the method of Täufel and Wagner, A., 535.

Wilborn, *F.*, determination of the colour of varnishes, oils, etc., B., 136.

deposit in varnishes, B., 714.

joint use of cobalt-lead driers, B., 714.

Wilbur, *P. C.* See Spoehr, *H. A.*

Wilcke, *G.* See Günther, *P.*

Wilcken, *J. A.*, molecular association of benzoic acid in benzene, A., 906.

Wilcoxon, *F.* See Browne, *A. W.*

Wild, *G. O.*, and Klemm, *R.*, spectroscopic examination of minerals. II. Beryl containing cassiterite, A., 594.

spectroscopic examination of minerals. I. Sapphire, A., 665.

spectroscopic examination of minerals. III. Topaz. IV. Diamond. V. Spodumene, A., 708.

Wild, *G. O.* See also Klemm, *R.*

Wild, *R.*, and Rustless Iron Corporation of America, manufacture of unstainable irons and steels, (P.), B., 635*.

manufacture of ferro-alloys, particularly ferrochromium alloys, (P.), B., 635*.

Wild, *R.*, and Rustless Iron Corporation of America, manufacture of ferro-chromium-alloy, (P.), B., 635*.

Wild, *S. V.* See Macpherson, *H.*

Wild, *W.* See Badische Anilin- & Soda-Fabrik.

Wilderman, *M.*, apparatus for production of hypochlorites and chlorates, (P.), B., 157*.

diaphragms to be used in electric batteries, (P.), B., 164*.

Wile, *U. J.* See Eckstein, *H. C.*

Wiles, *R.*, and Standard Oil Co., refining [hydrocarbon] oils, (P.), B., 623.

Wilharm, *W. C.*, rôle of oiliness in industrial lubrication, B., 619.

Wilhème, *I.* See Kupelwieser, *E.*

Wilhelm, *J. O.* See McLennan, *J. C.*

Wilhelm, *D. F.* See Schiltz, *J. J.*

Wilhelmy, *E.*, Zecman effect in spark and arc spectra of molybdenum, A., 767.

Wilke, *E.*, theory of concentrated solutions, A., 906.

Wilke, *K.* See Badische Anilin- & Soda-Fabrik.

Wilke-Dörfur, *E.*, Simon, *A.*, and Gühring, *E.*, evolution of vapours containing nitric oxide, carbon monoxide, and hydrogen cyanide in the decomposition of triolion, B., 288.

Wilkening, *L. G.*, heat-insulating material, (P.), B., 241.

Wilkin, *R. E.* See Wilson, *R. E.*

Wilkins, *F. J.* See Elliott, *G. A.*

Wilkins, *H.* See Sugden, *S.*

Wilkins, *L.* See Orr, *W. J.*

Wilkins, *S. D.*, Reiner, *H. C.*, and Gould, *E. C.*, molasses-product and method of producing the same, (P.), B., 928.

Wilkins, *T. R.*, actinium series and lead ratios in rocks, A., 654.

Wilkinson, *C.* See Lloyd, *L. L.*

Wilkinson, *H. H.*, and Union Sulphur Co., method of producing an allotropic form of sulphur, (P.), B., 53.

Wilkinson, *I.* See Stockdale, *D.*

Wilkinson, *J. A.* See Quig, *J. B.*

Wilkinson, *S. W.*, dyeing animal fibres and fabrics of a protein nature, (P.), B., 11.

Wilkinson, *W.* See Van Nuyts, *C. C.*

Will, *E.*, recovery of sulphur from waste gases from metallurgical furnaces, B., 672.

heat treatment of metal castings, (P.), B., 792*.

Will, *E.* and Hulsbruch, *W.*, sulphur content of mixed gas after preheating in the regenerators of a Siemens-Martin furnace, B., 859.

Willard, *C. F.*, process of treating resins, (P.), B., 680.

process for devulcanising vulcanised rubber, (P.), B., 957.

Willmarth, *E.*, steam-boiling of brewery worts, B., 73.

Willers, *C. U.* See Vesterberg, *K. A.*

Willatts, *P. G.*, and Hartford-Empire Co., high-temperature cement, (P.), B., 543.

Willey, *E. J. B.*, [nature of active nitrogen], A., 336.

active nitrogen, A., 1213.

Willey, *E. J. B.*, and Rideal, *E. K.*, active nitrogen. I. Its nature and heat of formation, A., 803.

Willgerodt, *C.*, reactions of aromatic compounds containing multivalent iodine, A., 168.

Willheime, *R.*, nucleic acid of cancer tissue, A., 89.

Williams, *A. M.* See Urquhart, *A. R.*

Williams, *A. T.*, influence of self-inductance and dilution on the persistence of spectral lines, the ultimate lines, and the quantum theory of optical spectra, A., 101.

specific lines of the arc spectrum, A., 215.

Williams, *C. S.*, and Roessler & Hasslacher Chemical Co., accelerator for vulcanisation of rubber, (P.), B., 453.

Williams, *E. H.*, rôle of magnetism in valency, A., 887.

Williams, *E. J.*, Compton effect and the reflexion of X -rays by crystals, A., 988.

Williams, *E. J.* See also Nuttall, *J. M.*

Williams, *F. A.*, effect of temperature on the viscosity of air, A., 234.

Williams, *G. K.*, determination of certain curves [of the lead-zinc-silver system and their application to the desilverisation of lead by the Parkes process], B., 93.

Williams, *G. L.*, process for making hydrated alumina and by-products, (P.), B., 52.

tempering light alloys, (P.), B., 63.

Williams, *G. M.*, and Furlong, *I.*, durability of cement drain pipe and concrete in alkali soils. I. Fourth Progress Report (1923), B., 441.

Williams, *H.*, magnetic properties of rare-earth oxides, A., 567.

Williams, *H. E.*, foam meter, B., 423.

Williams, *H. M.*, Boeghold, *A. L.*, and General Motors Research Corporation, producing malleable iron, (P.), B., 753.

Williams, *H. M.*, and General Motors Research Corporation, bearing material, (P.), B., 496.

Williams, *J.*, oxidation of rubber exposed to light, B., 452.

Williams, *J. F.*, rapid determination of alcohol in distilled spirits and of colour in whisky, B., 845.

Williams, *J. G.* See Ardagh, *E. G. R.*

Williams, *J. W.*, physical properties of nitromethane, A., 15.

Williams, *J. W.*, and Krchma, *I. J.*, dielectric constants of binary mixtures, A., 1000.

Williams, *J. W.*, and Skogstrom, *J. A.*, colloidal systems in nitromethane, A., 1095.

Williams, *K. A.* See Bolton, *E. R.*

Williams, *L. T. D.* See Lingstead, *R. P.*

Williams, *M.* See Sugden, *S.*

Williams, *R.*, effect of basic slag on the lime status of soils, B., 505.

Williams, *R. C.*, recovering diatomaceous earth from waste material [from sugar refining], (P.), B., 55.

Williams, *R. J.*, and Lasselle, *P. A.*, identification of creatine, A., 505.

Williams, *R. R.*, and Waterman, *R. E.*, solubility of vitamin-B in benzene, A., 980.

Williams, *W.* See Page, *H. J.*

Williams, *W. C.*, and McLaughlin Coal Reduction Co., metal-melting method, (P.), B., 196.

Williams-Gardiner, *A.*, liability to explosion of carburetted atmospheres in petroleum storage tanks, B., 731.

Williamson, *C. S.*, and Etz, *H. N.*, iron in anaemia, A., 196.

effect of age on the haemoglobin of the rat, A., 968.

Williamson, *J. E.* See Cameron, *A. T.*

Williamson, *W. T. H.* See Kermack, *W. O.*

Williamsport Building Products Co. See Frosell, *O.*

Willard Storage Battery Co. See Carpenter, C. C.

Willigen, P. C. van der. See Kruyt, H. R.

Willimott, S. G., vitamin-B of lemon rind, A., 437.

Willimott, S. G., and Moore, T., Fearon's "pyrogallol" test as a possible basis for the determination of vitamin-A, A., 980.

Willimott, S. G., and Wokes, F., oxidising enzymes in the peel of *Citrus* fruits, A., 1176.

vitamin-C of lemon rind, A., 1181.

Willie, H. F., and United States Industrial Alcohol Co., purification of [iso]-propyl alcohol (P.), B., 609.

Willmarth, C. A., peat drying machine, (P.), B., 228.

Willmer, H., flow of heat in the walls of ceramic kilns, B., 510.

Willmore, E. S. R. See Edwards, K. B.

Wills, G. O. See McKenzie, A.

Willsätter, R., advances in the isolation of enzymes, A., 321.

protein nature of invertase, A., 976.

pancreatic protein digestion, A., 1060.

oxygen transport in the living cell, A., 1176.

Willsätter, R., and Bamann, E., maltase, VI., A., 433.

maltase. VII. Separation of maltase and invertase, A., 433.

maltase. VIII. Direct fermentation of maltose by yeast rich in maltase, A., 544.

Willsätter, R., and Grassmann, W., plant proteases. VI. Proteases of yeast, A., 759.

Willsätter, R., Grassmann, W., and Ambros, O., plant proteases. II. Activation and inhibition of plant proteases by hydrocyanic acid. II. Substrate and optimum p_{H} for proteolysis, A., 433.

plant proteases. IV. Eropic component of some plant proteases. V. Identity of plant proteases, A., 543.

Willsätter, R., Kraut, H., and Erbacher, O., hydrates and hydrogels. VII. Isomeric hydrogels of aluminium hydroxide, A., 34.

hydrates and hydrogels. VIII. Aluminium hydroxide gel of the formula, AlO(OH)_3 , A., 35.

Willsätter, R., Kraut, H., and Lobinger, K., hydrates and hydrogels. IX. Silicic acid, A., 36.

Willsätter, R., and Lowry, C. D., *jun.*, invertase. XI. Decrease of invertase in yeast, A., 321.

Willsätter, R., and Pfannenstiel, A., nitrocarbamide, A., 1129.

Willsätter, R., Schneide, K., and Wenzel, E., invertase, XII., A., 321.

Willsätter, R., and Sobotka, H., yeast preparation, (P.), B., 381.

Willsätter, R., and Weber, H., peroxidase. V. Determination of peroxidase. VI. Inhibition of peroxidase by hydrogen peroxide, A., 1275.

Wilpnett, L., tunnel kilns, (P.), B., 192*.

Wilsey, R. B., X-ray analysis of some mixed crystals of the silver halides, A., 113.

Wilson, C. H., penetrators for testing penetration hardness [of metals], (P.), B., 370*.

Wilson, D. W., Long, W. L., Thompson, H. C., and Thurlow, S., changes in composition of urine after muscular exercise, A., 90*.

Wilson, D. W. See also Liljestrand, S. H.

Wilson, E., electrical conductivity of certain light aluminium alloys and copper conductors as affected by atmospheric exposure, B., 16.

Wilson, E. L., and Rundford Chemical Works, plaster of Paris, (P.), B., 242.

Wilson, F. J., Crawford, A. B., and Pickering, E. C., acyl derivatives of hydrazine, A., 394*.

Wilson, F. J. See also Baird, W., and Stephen, H. W.

Wilson, H., monograph and bibliography on terra cotta, B., 361.

Wilson, H. E. C., nitrogen and sulphur metabolism, A., 428.

Wilson, I. S. See Goss, F. R.

Wilson, J. See Morton, J.

Wilson, J. A., comparative resilience of leather and rubber heels, B., 138.

destructive action of sulphuric and hydrochloric acids upon leathers, B., 206.

sewage disposal at Milwaukee, B., 725.

tanning, 1876-1926, B., 839*.

Wilson, J. A., and Bear, A. W., effect of vegetable tanning upon the combination of collagen with acid, B., 205.

Wilson, J. A., and Daub, G., properties of shoe leather. I. Micro-structure, B., 504.

properties of shoe leather. IV. Strength, stretch, and stitch tear, B., 600.

Wilson, J. A., and Guettler, R. O., properties of shoe leather. III. Ventilating properties, B., 556.

Wilson, J. A., and Kern, E. J., effect of splitting on the tensile strength of leather, B., 376.

variation in tensile strength of calf leathers with humidity, B., 557.

properties of shoe leather. V. Area change with relative humidity, B., 798.

properties of shoe leather. VI. Resilience, B., 839.

Wilson, J. A., and Linear, S. O., properties of shoe leather. II. Chemical composition, B., 504.

Wilson, J. A., and Lines, G. O., hydrolysis of acid sulphate of chrome leather, B., 600.

Wilson, J. A., and Merrill, H. B., methods for measuring the enzyme activities of bathing materials, B., 205.

activities of pancreatic enzymes used in bathing upon different substrates, B., 290.

important rôle played by enzymes in bathing, B., 290.

Wilson, J. A. See also Young, A. C.

Wilson, J. B., and Sale, J. W., evaluation of commercial vanilla oleoresins, B., 384.

Wilson, M. L., [textile] piece [goods] carbonising, B., 435.

Wilson, N. E., decomposition of insoluble thio-salts [thioantimonates], (P.), B., 665.

Wilson, R. E., Parsons, L. W., and Chrisholm, S. L., production of [barium manganese in manufacture of] alkaline-earth permanganates, (P.), B., 743.

Wilson, R. E., and Schnetzler, H. G., effect of pressure and temperature on total volume of partially vapourised Midcontinent crude [petroleum], B., 523.

Wilson, R. E., and Standard Oil Co. Ltd., preventing loss by evaporation from storage tanks, (P.), B., 144.

Wilson, R. E., and Wilkin, R. E., use of equilibrium oils for automotive engines, B., 571.

Wilson, R. H. See Lewis, H. B.

Wilson, T. A., total and partial vapour pressures of aqueous ammonia solutions, A., 1000.

Wilson, W. E., and Lykken, H. G., drying refractory materials, (P.), B., 362.

tunnel kiln, (P.), B., 904.

Wiltshire, J. L. See Barnett, E. de B.

Winans, J. G., radiation emitted by optically excited zinc vapour, A., 102.

collisions of the second kind with excited mercury atoms in the $2P$ state, A., 768.

Winch, L. See Parker, T. G.

Winchell, A. N., $\text{FeSiO}_3\text{-CaSiO}_3\text{-MgSiO}_3\text{-NaFeSi}_2\text{O}_6$ system of monoclinic amphiboles, A., 380.

chlorite as a polycomponent system, A., 494.

Windaus, A., purification of digitonin; accompanying saponins, A., 409.

saponins and their relation to other plant products, A., 1146.

Windaus, A., with Bohne, A., Linser, O., Knehe, Koch, Jacobi, Mecke, and Gräbke, constitution of hydroxycholic acid, A., 723.

Windaus, A., and Freeze, C., digitoxin, A., 153.

Windaus, A., and Reverey, G., and Schwieger, A., cymarin and strophanthin, A., 73.

Windaus, A., and Schoor, A. van, chenodeoxycholic acid. II. A., 169.

Windaus, A., and Shah, S. V., new degradation products of digitogenin, A., 401.

Windaus, A., and Westphal, K., oleanadin, A., 1146.

Windisch, F. See Nenherg, C.

Windisch, W., assimilation, respiration, and fermentation, B., 603.

methods of decarbonating brewing water, B., 602.

Windaus, W., and Kolbach, P., influence of the brewing water on the acidity of the wort and beer, B., 962.

Windisch, W., Kolbach, P., and Banholzer, W., valuation of hops, B., 417.

influence of hop constituents on head-formation in beer, B., 687.

Windisch, W., Kolbach, P., and Wentzell, E., changes in the degree of dispersion of the proteins of barley during malting, mashing, and fermentation, B., 170.

Windisch, W., Kolbach, P., and Ycté, J., resinification of the α -bitter acid of hops (humulone) by molecular oxygen, B., 928.

Windisch, W. See also Elektro-Osmose Akt.-Ges. (Graf Schwerin Ges.).

Windsor, M. M., some double fluorides of zirconium, A., 369.

Wing, H. J., and Thompson, T. J., thermoregulator, A., 141.

solubility of barium propionate, A., 236.

Wing, R. See Lamson, P. D.

Wingler, A. See Farbenfabr. vorm. F. Bayer & Co.

Winkelbleck, L., guaiacol derivatives, A., 60.

Winkelmann, W., ore-reducing furnace, (P.), B., 674.

Winkelmann, H. See Jaeger, A.

Winkelmann, H. A., Trumbull, H. L., and Goodrich Co., B. F., composition of matter [vulcanising rubber], (P.), B., 23.

Winkler, F. See Badische Anilin- & Soda-Fabrik, and L. G. Farbenind. A.-G.

Winkler, K., treatment of cementitious material, (P.), B., 91*.

Winkler, L. W. See Elkert, L.

Winkler, R. See Sejvl, J.

Winks, F. See Turner, W. E. S.

Winlock, J. See Kelley, G. L.

Winogradov. See Vinogradov.

Winogradsky. See Vinogradski.

Winship, W. W., vitreous silica and vitreous quartz, B., 947.

Winship, W. W., and Thermal Syndicate, Ltd., composition of matter; [utilisation of scrap fused silica], (P.), B., 667.

Winslow, C. E. A., and Fleeson, E. H., influence of electrolytes on the electrophoretic migration of bacteria and of yeast cells, A., 324.

Windsor, H. W. See Prince, A. L.

Winston, J. R. See Yothers, W. W.

Winter, A. G. See Clark, R. H.

Winter, A. R., utilisation of minerals by ewes during the period of gestation, A., 429.

Winter, E. H., treatment of peat, (P.), B., 777.

Winter, H., thermal analysis of carbonisation, B., 569.

Winter, L. B., and Kleb & Bark G.m.b.H., air seals for furnaces with travelling grates, (P.), B., 904*.

Winter, L. B., insulin convulsions and recovery, A., 979.

Winter, L. B., and Smith, W., insulin and micro-organisms, A., 436.

Winter, M. See Pringsheim, H.

Wintermute, H. A., and Research Corporation, separating light materials from gases, (P.), B., 498.

Winternit, C., [device for] preventing the rapid decomposition of ice colours [during printing], B., 581.

Winternsteiner, O., and Hannel, H., determination of arsenic in small quantities of organic compounds, B., 994.

Wintgen, H., principles of colloid chemistry, A., 1202.

Wintgen, R., and Meyer, Erich, effect of colloidal and semi-colloidal ferric oxide on gelatin solutions. II. A., 1204.

Wintner, C., relation between velocity of photochemical reactions and dielectric constant, A., 584*.

relation between quantum sensitivity and intensity of radiation, A., 585*.

Winther, C., and Mynster, E. H., ultra-violet filter, A., 493.

Winthrop Chemical Co. See Callisen J., Hahl, H., Herminghaus, H., Kropp, W., Schulemann, W., Taub, L., and Ursin, W.

Wintsch, V., *jun.*, and Conney, R. H., stabilising solutions containing loosely-combined oxygen [hydrogen peroxide]; stabiliser for solutions containing loosely-combined oxygen, (P.), B., 53.

Winzenried, F., and Timens, R., apparatus for refining aluminium, (P.), B., 330.

Winzer, C. B., and Brown, P. A., carbonisation of coal, peat, wood, etc., (P.), B., 523.

Wirtz, A. F. See French, H. E.

Wirth, R. T., alloy steel, (P.), B., 832.

Wisconsin Railroad Commission, investigation of pollution of Flambeau River at Park Falls, B., 725.

Wise, E. M., and Wadsworth Watch Case Co., white-gold alloy, (P.), B., 444.

Wislicki, L. See Rosenthal, F.

Wisaner, G., lubricating compounds, (P.), B., 941.

Wismann, F. J. von, diatomic molecules, A., 779.

monatomic molecule of the noble gases, A., 1194.

Wit, H. See Pauli, W.

Witham, E. See Kenner, J.

Witherspoon, M. G. See Walton, D. C.

Withey, W. H., and Millar, H. E., determination of aluminium oxide in aluminium metal, B., 546.

Witmer, E. E., critical potential of the negative band spectrum of nitrogen, A., 107.

critical potentials and the heat of dissociation of hydrogen as determined from its ultra-violet band spectrum, A., 552.

rotational energy of the polyatomic molecule as an explicit function of the quantum numbers, A., 1192.

Witmer, E. E. See also Kemble, E. C.
 Witt, A. See Predvoditeley, A.
 Wittgenstein, A., and Gaedertz, A., lactic acid content of aqueous humour. I. Relationship between the lactic acid contents of blood plasma and aqueous humour, A., 1167.
 Wittig, A., production of salt from brine, (P.), B., 668.
 Wittig, G., [with Bangert, F., and Richter, H. E.], benzo-1:4-pyrones [chromones], A., 300.
 Wittig, G., [with Richter, H. E.], preparation of benzodi-4-pyrones, A., 302.
 Wittig, G., and Bangert, F., stereochemistry of the oximes of 1:3-diketones. I. Action of hydroxylamine on 3-acetyl-2:6-dimethylchromone, A., 175.
 Action of hydroxylamine on chromones, A., 176.
 Wittleton, G. R. See Sargent, D. F.
 Wittreich, H. See Treff, W.
 Witts, C., fertiliser, (P.), B., 764.
 Witny, J., better utilisation of phosphoric acid present in soils, B., 250.
 Witzemann, E. J., influence of phosphates on the oxidation of butyric acid with hydrogen peroxide, A., 269.
 simultaneous oxidation of dextrose and butyric acid, A., 270.
 oxidation of α - and β -hydroxybutyric acids with hydrogen peroxide, A., 270.
 Wizinger, R. See Dilthey, W.
 Wobbe, D. E. See Noyes, W. A., jun.
 Wöhler, L., luminescence on heating the oxides of chromium, iron, zirconium, and titanium and magnesium pyrophosphate, A., 335.
 silicon and nitrogen, A., 1113.
 direct method for testing initiating explosives (detonators), B., 773.
 Wöhler, L., and Balz, P., formation and decomposition of the complex sodium chlorides of platinum and iridium, A., 260.
 Wöhler, L., and Dierksen, J., isomerism of Guignet's green, a phenomenon of particle size, B., 166.
 purification of "antichlor" [sodium thiosulphate] from sulphite and sulphate by crystallisation, B., 190.
 Wöhler, L., and Metz, L., separation of the platinum metals, B., 160.
 Wöhler, L., and Müller, F., binary bromides and iodides of platinum, A., 259.
 Wöhler, L., and Müller, W., rhodium chlorides and oxides, A., 138.
 Wöhler, L., and Rabinovitsch, M., calorimetric determination of surface luminescence, A., 335.
 Wöhler, L., and Schäffer, W., new double salt of ammonium nitrate and sulphate, A., 256.
 Wöhler, L., and Schliephake, O., silicides of calcium and magnesium, A., 368.
 Wöhler, P., and Rhenania Verein Chemische Fabrik Akt.-Ges., production of highly-active charcoal from wood, (P.), B., 699.
 Woerden, S. van, refractometric investigation of hexahydromethylacetophenones [hexahydrotolyl methyl ketones], A., 293.
 Wohl, A., explosive mixture, (P.), B., 221.
 Wohl, K., and Kadow, W., dissociation and specific heats of chlorine and hydrogen chloride at high temperatures, A., 246.
 Wohlers, F. T., and Anhydrous Metallic Chlorides Corporation, apparatus for making anhydrous metal chlorides, (P.), B., 126.
 Wohlgemuth, J., enzymes of the skin. IV., A., 865.
 Wohlgemuth, J., and Klopstock, E., enzymes of the skin. V. Respiration and glycolysis of the skin and the influence of hormones, A., 1060.
 Wohlgemuth, J., and Nakamura, Y., decomposition of sugar in the central nervous system of man, A., 1055.
 enzymes of the skin. VI. Behaviour of lipase and presence of phosphatase, sulphatase, and carboxylase in the skin, A., 1060.
 Wohlgemuth, J., and Sugihara, N., enzymes of the skin. III. Comparison of the enzymes of the skin of man and animals and the effect of light, A., 93.
 activation and heat stability of enzymes; relation between rennin and pepsin, A., 94.
 Wohlnicht, E. See Gronover, A.
 Woidich, K. See Weiss, R.
 Wojnoff, K. See Weissenberger, G.
 Wojs, A. See Strebinger, R.
 Wokes, F. See Willmott, S. G.
 Wolesensky, E., synthetic tanning materials, B., 375.
 behaviour of synthetic tanning materials towards hide substance, B., 455.
 action of sodium sulphate in synthetic tanning materials, B., 925.
 analysis of synthetic tanning materials, B., 1022.
 Wolf, A. See Würtembergische Metallwarenfabrik.
 Wolf, Adolphe, crépe effects on delaines, B., 123.
 Wolf, Anton. See Freudenberg, K.
 Wolf, C. G. L. See Lund, G. S.
 Wolf, Hans. See Hahn, F. L.
 Wolf, Hermann, cracking hydrocarbon oils, (P.), B., 263.
 continuous production of low-boiling-point hydrocarbons from hydrocarbons having a high boiling point, (P.), B., 972.
 Wolf, J., & Co. See Walkman, S. A.
 Wolf, K., production of highly efficient catalysts, (P.), B., 145.
 Wolf, K. See also Ruppel, W.
 Wolf, Karl, accuracy of electrometric measurement of p_H , A., 927.
 dependence of dielectric constant on pressure for gases and vapours at low pressures, A., 1081.
 Wolf, Kuno, Langstein, E., and American Electro-Osmosis Corporation, electro-osmotic purification of saccharine juices, (P.), B., 380*.
 Wolf, K. L., continuous absorption and emission spectra of the halogens, A., 213.
 Wolf, K. L. See also Herzfeld, K. F., and Schieler, H.
 Wolf, L., and Ristau, K., phosphorus. I. Colourless phosphorus, A., 256.
 Wolf, R. B., bleaching of paper pulp, (P.), B., 661.
 Wolfenden, J. E., critical potentials of hydrogen in the presence of catalytic nickel and copper, A., 217.
 Wolfer, H., and Obermaier & Co., centrifugal machine for treating textiles with liquid and gases, (P.), B., 87*.
 Wolfers, F., probable action of matter on radiation quanta, A., 881.
 Wolfs, O., and Maeder, H., purification of phosphoric acid containing arsenic, (P.), B., 53*.
 Wolff, H. See Grimm, H. G.
 Wolff, Hans, detection of rosin [in linseed oil], B., 66.
 determination of solvent in paints, varnishes, etc., B., 136.
 determination of resin [and fatty acids in varnishes] by the Wolff-Scholze method, B., 202.
 electrolytic deposition of chromium, (P.), B., 246.
 china wood [tung] oil, B., 413.
 drying process of the "drying oils," B., 450.
 Wolff, Hans, ester gum [rosin glyceride] and the chemical reactions in rosinate varnish preparation, B., 501.
 examination of sandarac, B., 554.
 polymerisation of tung oil, B., 637.
 relations between the constants of fats, B., 836.
 examination of kaum dust, B., 837.
 Storch-Morawski [Liebermann] reaction and rosinate-varnishes, B., 837.
 Wolff, Hans, and Toelde, W., examination of resins, B., 796.
 Wolff, Hans, and Zeidler, G., adsorption of soluble salts by paint films, B., 501.
 alteration of paint films on heating, B., 679.
 Wolff, Hugo. See A.-G. für Anilin-Fabrik, and Badische Anilin- & Soda-Fabrik.
 Wolff, H. J., energetics of radioactive emission, A., 1190.
 Wolff, J., presence of hitherto undescribed oxydins in certain fungi, A., 322.
 Wolff, J., and Grandchamp, L., oxidisability of iron in wines, B., 104.
 Wolff, L., danger of mercury vapour, A., 815.
 Wolff, L. A., and De Jongh, S. E., substance which reduces intraocular pressure, A., 91.
 Wolff, P., testing cast-iron [previous to casting], B., 544.
 Wolff, W. See Richter, F.
 Wolff & Co., Czapek, E., and Weingand, R., preparation of flocculent cellulose products, (P.), B., 10.
 means for effecting solution of solids in liquids, (P.), B., 303.
 production of film-like bands from cellulose solutions, (P.), B., 738.
 Wolff & Co., and Frowein, F., complete utilisation [of the end liquors from] crude potassium salts, (P.), B., 322.
 Wolff & Co., and Hampel, H., production of potassium nitrate, (P.), B., 321.
 Wolfenstein, R., and Marcus, A., waterproofing cellulose, paper, and the like, (P.), B., 534.
 Wolfgang, K., action of acids on artificial silks, B., 659.
 Wolfram, A. See Badische Anilin- & Soda-Fabrik, and I. G. Farbenind. A.-G.
 Wolfram, H. G., and Harrison, W. N., effects of composition on the properties of sheet steel enamels, B., 128.
 Wolfram, L., decolorising diamonds, (P.), B., 238.
 Wolfschlag, F. See Skrapn, S.
 Wolfschlag, A., refractory acid-resistant materials, (P.), B., 632.
 fire- and acid-proof plastic substances [refractories], (P.), B., 824*.
 Wolfsohn, G., arc spectrum of copper under diminished pressure, A., 874.
 Wollaston, T. R., combined gas producer and furnace for use with steam generators, (P.), B., 84.
 vertical or inclined gas-making retorts, (P.), B., 84.
 Wollaston, W. See Whittaker, H. F.
 Wolter, H. R., and Onnes, H. K., electrical resistance of sodium and potassium in the temperature region of liquid helium, A., 565.
 Wolzogen-Kühr, C. A. H. von, manganese in the Amsterdam dune water supply, B., 724.
 Womersley, A. See Lloyd, L. L.
 Woo, L. See Kloksy, S.
 Woo, Y. H., distribution of energy between the modified and the unmodified rays in the Compton effect, A., 447.
 Wood, A. See Gilman, H.
 Wood, A. E., Greene, A. R., and Provine, R. W., desulphurising effects of sodium hypochlorite on naphtha solutions of organic sulphur compounds, B., 811.
 Wood, A. E., Sheely, C., and Trusty, A. W., action of petroleum-refining agents on naphtha solutions of pure organic sulphur compounds, B., 259.
 Wood, C. E., and Neale, A. E. T., determination of water in hydrocarbon oils, shales, and lignites, B., 36.
 Wood, C. E., Such, J. E., and Scarf, F., rotatory dispersion of the esters of lactic acid. II. Isomeric butyl esters, A., 994.
 Wood, F. M., chemical nature of the cell membrane, A., 1065.
 process for preparing vaccines, (P.), B., 610.
 Wood, H. See Harrison, H. A.
 Wood, J. K. See Burns, H. M., and Mounfield, J. D.
 Wood, L. A., and Mineral Separation, Ltd., manufacture of fuel briquettes, (P.), B., 37.
 Wood, N. E. See Francis, F.
 Wood, R. E. See Smith, O. M.
 Wood, R. W., structure of cadmium and zinc resonance lines, A., 986.
 self-reversal of the red hydrogen line, A., 1069.
 Wood, T. B., and Capstick, J. W., maintenance requirement of the adult sheep, A., 637.
 Wood, T. B. See also Elliott, W.
 Wood, W. A. See James, R. W.
 Wood, W. R. See Underfeed Stoker Co.
 Wood Products and By-Products Corporation. See Fish, F. K., jun.
 Woodall-Duckham, Ltd., and Reber, J. W., dry-quenching of coke, (P.), B., 815*.
 Woodall-Duckham, Ltd., Smith, E. W., and Finlayson, T. C., removal of sulphur from gas, (P.), B., 230.
 manufacture of gas, (P.), B., 699.
 Woodhead, A. E. See Sandoz Chemical Co., Ltd.
 Woodman, H. E., and Amos, A., ensilage of sugar-beet tops, B., 895.
 losses in the tower silo, B., 930.
 Woodman, H. E., Blount, D. L., and Stewart, J., nutritive value of pasture. I. Seasonal variations in the productivity, botanical and chemical composition, and nutritive value of medium pasture on light sandy soil, B., 506.
 Woodman, H. E., and Hanley, F., study of the process of making stack silage, B., 296.
 Woodman, R. M., preparation and conditions of formation of the two possible types of emulsion in the system cresol-gelatin-water, A., 676.
 physics of spray liquids. III. Ease of formation of emulsions. IV. Creaming capacity of emulsions—paraffin solutions, B., 139.
 Woodman, R. M., and Corbet, A. S., distribution of pyridine between water and benzene, A., 66.
 Woodman, R. M. See also Corbet, A. S., and Rhodes, E.
 Woodman, T. C. See British Celanese, Ltd.
 Woodroffe, D., control of chrome liquors in the one-bath chrome tanning process [report of committee of British section of the Society of Leather Trades Chemists], B., 63.
 determination of fat in leather, B., 926.
 physical and chemical properties of vegetable tanned insole bellies. V. Wear-resistance, B., 989.
 Woodruff, A. E., variation in the photo-electric emission from platinum, A., 3.

Woods, *E.*, rôle of cystine and mineral elements in nutrition, *A.*, 197.
 Woods, *E.* See also Sherman, *H. C.*
 Woods, *E. L.* See Basterfield, *S.*
 Woods, *J.* furnaces, (*P.*), *B.*, 93*.
 Woodside, *W. P.*, *Dawe, C. N.*, and *Studebaker Corporation*, alloy steel, (*P.*), *B.*, 283.
 Woodvine, *G. R.*, and *Roberts, A. L.*, influence of segregation on the corrosion of boiler tubes and superheaters, *B.*, 471, 855*.
 Woodward, *G. E.* See *Whitmore, P. C.*
 Woodworth, *S. E.*, and *Hamilton, Beauchamp, & Woodworth*, filter-medium support, (*P.*), *B.*, 776.
 Woog, *P.*, spreading of lubricants on metallic and solid surfaces, *B.*, 37.
 Woof, *B.* See *Qnastel, J. H.*
 Woolner, *A. jun.*, producing fertiliser and cattle feed, (*P.*), *B.*, 689.
 Wooster, *P. L.*, process of making material for filtering and decolorising, (*P.*), *B.*, 81*.
 Wooster, *W. A.* See *Ellis, C. D.*, and *Rutherford, (Sir) E.*
 Worden, *S.* See *Smith, N. R.*
 Working, *E. B.*, physical and chemical factors in the growth of asparagus, *A.*, 438.
 Wormall, *A.* See *Gordon, J.*
 Worrall, *D. E.*, action of magnesium butyl bromide on aromatic thiocarbimides, *A.*, 161.
 Worswick, *B.* See *Edwards, R. S.*
 Worthing, *A. G.*, spectral emissivities of tantalum, platinum, nickel, and gold as a function of temperature, and the m. p. of tantalum, *A.*, 892.
 physical properties of well-seasoned molybdenum and tantalum as a function of temperature, *A.*, 892.
 Wrangell, *M. von*, colorimetric method for rapid determination of phosphoric acid in very dilute solutions [soil extracts, etc.], *B.*, 841.
 Wrangell, *M. von*, and *Baase, W.*, phosphoric acid content of natural soil solutions, *B.*, 841.
 Wrangell, *M. von*, and *Koch, E.*, solubility relationships in their application to tertiary phosphates, *B.*, 841.
 Wrangell, *M. von*, and *Meyer, L.*, "available" part of the phosphoric acid in soil, *B.*, 842.
 Wrede, *F.*, spermine, *IV.*, *A.*, 751.
 Wreschner, *M.*, and *Loeb, L. F.*, manufacture of a preparation which emits β -rays, (*P.*), *B.*, 768.
 Wright, *A.*, and *Young, F. W.*, rotary drum filter, (*P.*), *B.*, 728.
 Wright, *(Sir) A. E.*, "inter-traction," *A.*, 901.
 Wright, *A. M.*, and *Bevis, (Miss) J. F.*, chemistry of flesh foods No. 6; canned meats, *B.*, 643.
 Wright, *C. H.*, hot springs at Nasavusavu [Fiji], *A.*, 708.
 relations between certain soil moisture constants and the determination of the vesicular coefficients of soils, *B.*, 292.
 Wright, *D. D.* See *Glancy, W. E.*
 Wright, *G. F.* See *Bentley Co. Ltd.*
 Wright, *H. N.* See *Basterfield, S.*
 Wright, *J. G. E.*, and *General Electric Co.*, polyhydric alcohol-organic acid resinous condensation products, (*P.*), *B.*, 502*.
 Wright, *J. G. E.* See also *British Thomson-Houston Co.*
 Wright, *N. C.*, action of hypochlorites on amino-acids and proteins, *A.*, 906.
 calcium-caseinogen equilibria and their bearing on the secretion of calcium in milk, *A.*, 1269.
 Wright, *N. C.* See also *Mattick, A. T. R.*
 Wright, *R.*, selective solvent action. *V.* Salting in, *A.*, 787.
 Wright, *S. J.*, plastic deformation of single metallic crystals, *A.*, 783.
 Wright, *S. J.* See also *Gough, H. J.*
 Wright, *S. L. jun.*, micro-determination of blood-sugar, *A.*, 1067.
 Wright, *(Miss) W. M.*, oxidations on charcoal, *A.*, 582.
 Wright, *(Miss) W. M.* See also *Rideal, E. K.*
 Wroten, *J. F.*, and *Liberty Yeast Corporation*, yeast manufacture, (*P.*), *B.*, 601.
 Wu, *H.*, Donnan equilibrium and osmotic pressure relationship between red blood-corpuscles and serum, *A.*, 1165.
 Wilken, *H.* See *Dilthey, W.*
 Wilfing, *J. A. von*, See *Ugger, H.*
 Winsch, *A.* See *Kliegl, A.*
 Würger, *J.* See *Society of Chemical Industry in Basle.*
 Würth, *K.*, white lead pigments, *B.*, 760.
 Wüst, *F.*, recovery of tin from alloys containing iron, (*P.*), *B.*, 197.
 influence of oxidation reactions on the blast-furnace process, *B.*, 919.
 Wull, *O. R.*, evidence for the existence of activated molecules in a chemical reaction, *A.*, 485.
 Wulff, *C.* See *Sldta, A.*
 Wulf, *O.* See *Farbw. vorm. Meister, Lucius, & Brüning.*
 Wulf, *W. J.*, process for making a kola preparation, (*P.*), *B.*, 644.
 Wunschendorff, *H.*, comparison of methods of protein precipitation, *A.*, 211.
 complete precipitation of proteins by the hydroxides of tervalent metals. I. Use of common alum, II. Chrome and ferric alums, *A.*, 762.
 Wunschendorff, *H.* See also *Mailand, L. C.*
 Wurmser, *R.*, law of photochemical equivalents in photosynthesis by chlorophyll, *A.*, 486.
 oxidation potential of the cell and oxidation-reduction phenomena, *A.*, 1055.
 Wurstemberger, *F. von*, determining the nature of the conditions which set up corrosion in plant traversed by flowing liquids, (*P.*), *B.*, 728.
 Württembergische Metallwarenfab., and *Wolf, A.*, electroplating baths for simultaneously obtaining metallic deposits of various thicknesses, (*P.*), *B.*, 757*.
 Württembergische Metallwarenfab., *Wolf, A.*, and *Bauer, E.*, electroplating baths for simultaneously obtaining metallic deposits of various thickness, (*P.*), *B.*, 757*.
 Wusow, *R.*, dry cooling of coke, (*P.*), *B.*, 573.
 Wuth, *O.*, blood changes in convulsions, especially in epilepsy, *A.*, 1169.
 Wyedenski. See *Vedenski.*
 Wyant, *L. D.*, oil-cracking and carbon-removing method and apparatus, (*P.*), *B.*, 120.
 Wyant, *L. D.*, and *Marsh, L. G.*, paraffin wax and its properties; methods of testing wax, and of analysing oil-wax mixtures, *B.*, 37.
 Wyatt, *W. F.* See *Tryhorn, F. G.*
 Wyckoff, *R. W. G.*, crystal structure of β -quartz, *A.*, 228.
 Wyckoff, *R. W. G.*, and *Crittenden, E. D.*, X-ray examination of some ammonium catalysts, *A.*, 112.
 Wyckoff, *R. W. G.*, and *Crittenden, E. D.*, preparation and crystal structure of ferrous oxide, *A.*, 113.
 Wyckoff, *R. W. G.*, *Gregg, J. W.*, and *Bowen, N. L.*, X-ray diffraction patterns of mullite and sillimanite, *A.*, 664.
 Wyckoff, *R. W. G.*, and *Ksanda, C. J.*, space model for crystal structures, *A.*, 662.
 Wyckoff, *R. W. G.* See also *Bowen, N. L.*
 Wydryzki, *S.* See *Szperl, L.*
 Wyman, *B.* See *Jones, J. J. M.*, *Morton, J.*, and *Scottish Dyes, Ltd.*
 Wynn-Williams, *C. E.*, investigation into the theory of the "three point gap," *A.*, 331.

Y.

Yablick, *M.* See *Perrott, G. St. J.*
 Yajnik, *N. A.*, *Bhalla, M. D.*, *Talwar, R. C.*, and *Sood, M. A.*, relation between viscosity and vapour pressure of binary mixtures, *A.*, 235.
 Yajnik, *N. A.*, and *Bhatia, S. L.*, coagulation of complex negative sols by electrolytes, *A.*, 123.
 Yajnik, *N. A.*, *Sharma, R. K.*, and *Bharadwaj, M. C.*, surface tension and vapour pressure of binary mixtures, *A.*, 1000.
 Yajnik, *N. A.* See also *Bhatnagar, S. S.*
 Yamada, *K.*, thiazole dyes, *A.*, 850.
 Yamada, *N.*, renal function in pregnancy, *A.*, 859.
 Yamada, *N.*, long-range particles emitted by polonium and the active deposits of radium and thorium, *A.*, 220*.
 Yamada, *N.* See also *Curie, (Mme) I.*
 Yamaguchi, *B.*, and *Kano, Y.*, quantity of helium and other gases contained in Japanese natural gases, *III.*, *A.*, 1118.
 Yamaguchi, *M.*, cholesterol metabolism. I. Birds, *A.*, 860.
 Yamaguchi, *S.*, salivary glands. II. Occurrence of glycogen with reference to the excretion of sugar and glycogen, *A.*, 87.
 Beckmann's rearrangement, *XV.* and *XVI.* Catalytic action of reduced copper on oximes, *A.*, 520, 616, 952*.
 catalytic action of reduced copper on pinacones, *A.*, 727.
 Yamaguti, *B.* See *Kano, Y.*
 Yamamoto, *H.*, *Inouye, K.*, and *Nosawa, Y.*, preparing pyrethrum insecticides, (*P.*), *B.*, 894.
 Yamamoto, *K.* See *Kobayashi, K.*
 Yamamoto, *S.*, cooling and moistening of air, (*P.*), *B.*, 34*.
 Yamamura, *S.*, freezing-point curves of the systems benzene-ether and benzene-acetone, *A.*, 1208.
 Yamane, *S.* See *Maeda, T.*
 Yamasa, *T.*, experiment to show that the sub-permanent set of vulcanised rubber decreases with increased period of vulcanisation, *B.*, 761.
 Yamazaki, *J.*, production of pure aluminium from insoluble aluminium materials such as clay or alunite, *B.*, 832.
 Yamazaki, *J.*, and *Furukawa, J.*, production of alumina from alunite, *B.*, 874.
 Yant, *W. P.* See *Sayers, R. R.*
 Yard, *W. S.* See *Koppers Co.*
 Yarsley, *V. E.* See *Morgan, G. T.*
 Yates, *O. W. C.*, latent heats of vaporisation of ethyl and methyl chlorides, *A.*, 1057.
 Yee, *J. Y.* See *Guernsey, E. W.*
 Yilner, *C. A.*, preparation and specific gravity of mesityl oxide, *A.*, 714.
 Yntema, *L. F.*, rare earths. *XXIV.* Theory of colour, *A.*, 780.
 Yntema, *L. F.* See also *Harris, J. A.*
 Yocom, *L. E.*, translocation of food materials of the wheat seedling, *A.*, 438.
 Yoder, *L.*, relation between peroxidation and vitamin-*D*, *A.*, 1279.
 Yoe, *J. H.*, effect of temperature of formation on the physical character of hydrous aluminium oxide, *A.*, 24.
 perchloric acid as an analytical reagent; determination of potassium, *A.*, 261.
 apparatus for the determination of low concentrations of chlorine in chlorine-air mixtures, *A.*, 927.
 Yoe, *J. H.*, and *Freyer, E. B.*, hydrogen-ion concentration and the viscosity of aluminium, chromic, and ferric hydrosols, *A.*, 1203.
 Yoté, *J.* See *Windisch, W.*
 Yoganandam, *E.* See *Choudary, K. S.*
 Yokozima, *T.*, preparation of yeast glycogen, *A.*, 758.
 Yokozima, *N.* See *Suzu, K.*
 Yonekura, *T.* See *Ishiwara, T.*
 Yorke, *A. F.* See *Raikes, H. R.*
 Yorston, *F. H.* See *Whitby, G. S.*
 Yokishikawa, *K.* See *Kubota, B.*
 Yoshimura, *I.* See *Ilomori, S.*
 Yoshitomi, *F.*, action of bromine on caffeine; preparation of bromothiopylline, *A.*, 82.
 Yoshizawa, *K.*, producing tuberculin, (*P.*), *B.*, 720.
 Yost, *D. M.*, catalysis by silver ion of oxidation of chromic salts by persulphuric acid; existence of tervalent silver compounds, *A.*, 251.
 catalytic effect of silver ammonia ion in the oxidation of ammonia by persulphates, *A.*, 365.
 Yost, *D. M.*, and *Zabaro, S.*, kinetics of the oxidation of tervalent titanium by iodine, *A.*, 691.
 Yost, *D. M.* See also *Bonner, W. D.*
 Yothers, *W. W.*, and *Winston, J. R.*, colloidal clays as emulsifiers for mineral oils used in spraying citrus groves, *B.*, 30.
 Young, *A.* See *Holliday, L. B., & Co. Ltd.*
 Young, *A. G.*, haematological studies of aniline poisoning, *A.*, 756.
 Young, *A. G.*, *Muehlberger, C. W.*, and *Meek, W. J.*, acute aniline poisoning, *A.*, 756.
 Young, *A. G.*, and *Wilson, J. A.*, acetanilide poisoning, *A.*, 756.
 Young, *A. W.* See *Udylite Process Co.*
 Young, *B.*, distillation of tar, (*P.*), *B.*, 310.
 Young, *C. O.* See *Curne, G. O. jun.*
 Young, *D.* See *Schweikohle Kohlenschwelungsges.*
 Young, *D. M.* See *Sommer, H. H.*
 Young, *F. W.* See *Wright, A.*
 Young, *H. C.* See *Dunlop Rubber Co., Ltd.*, and *Hendricks, S. B.*
 Young, *H. J.* See *Fletcher, J. E.*
 Young, *J.*, crystal structure of meteoric iron as determined by X-ray analysis, *A.*, 1034.
 Young, *Jacob*, still, (*P.*), *B.*, 567.

Young, L., and Ruggles, G. W., automatic gas analyser and control, (P.), B., 574.
 Young, N., apparatus for the simultaneous production of low-temperature tar, semi-coke, and gas of high calorific value, (P.), B., 4.
 Young, P., and Texas Co., still [for coking petroleum], (P.), B., 182.
 Young, R. R. T., determination of nicotine in tobacco, B., 644.
 Young, W. J. See Cook, G. A., and Kerr, N. G.
 Youngburg, G. E., and Finch, M. W., effect of temperature on protein metabolism, A., 802.
 Youngman, R. H., unburned refractory brick, (P.), B., 441*.
 Youngman, R. H., and Harbison-Walker Refractories, Co., unburned refractory brick, (P.), B., 192.
 Yovanovitch, A. See Fontès, G., and Nicloux, M.
 Yovanovitch, D. K., mesothorium-2, A., 331.
 Yovanovitch, D. K., and Dorabialskia, (Mle.), A., new method for measuring the absorption of β - and γ -rays of radioactive substances, A., 722.
 Yimoto, K. See Terada, T.
 Yung, W. A., [glass] melting furnace, (P.), B., 55.
 Yusikievich, N. F., manufacture of sodium chromate, B., 537.
 Yusikievich, N. F., and Karzhanov, V. A., manufacture of sulphur from sulphurous gas obtained as a by-product in refining metals, B., 1012.
 Yvon, J. See Bourgnol, M.

Z.

Zabaro, S. See Yost, D. M.
 Zablocki, W. See Centnerszwer, M.
 Zahrodník, A. See Nametkin, S.
 Zachariassen, W., crystal structures of beryllium oxide and beryllium sulphide, A., 562.
 crystal structure of the A modification of the sesquioxides of lanthanum, cerium, praseodymium, and neodymium, A., 1195.
 Zachariassen, W. See also Ulrich, F.
 Zack, O. See Weissenberger, G.
 Zäch, C. See Tambar, J.
 Zahlova, L. See Frejka, J.
 Zahn, C. T., association, adsorption, and dielectric constant, A., 456.
 electric moment of carbon dioxide, ammonia, and sulphur dioxide, A., 565.
 Zahn, C. W., additive product of mandelic acid and benzene, A., 66.
 Zahn, H., dielectric constants of good conducting materials, A., 778.
 Zahn, H. See also Hellmann, H.
 Zahn, K. See Farbw. vorm. Meister, Lucius, & Brüning.
 Zahn, R. See Kalle & Co., A.-G.
 Zaidan Hojin Rikagaku Kenkyujo, process for producing a liquid insecticide containing the effective ingredients of *Derris* species, (P.), B., 614.
 Zaidan Hojin Rikagaku Kenkyujo. See also Okochi, M.
 Zajdel, R., and Funk, C., synthesis of vitamins by yeasts, A., 207.
 use of colloidal ferric hydroxide sol for adsorbing the vitamins-B and -D, A., 437.
 Zaki, A. See Heilbron, I. M.
 Zakowski, J., growth of small gold particles in the preparation of gold hydrosols from dilute alkaline gold chloride solutions, A., 1005.
 Zala, P. See Zetzsche, F.
 Zaleski-Kibardian, (Mle.) J. See Favorsid, A.
 Zamboni, C., physical transformations undergone by cement during setting, B., 1015.
 Zambonini, F., isomorphism of the molybdates of the rare-earth metals with those of calcium, strontium, barium, and lead, A., 113.
 presence of a caesiferous variety of potassium fluoroborate among the products of the present-day activity of Vesuvius, A., 934.
 Zambonini, F., and Carobbi, G., double sulphates of the rare-earth and alkali metals. III. Double sulphates of lanthanum and sodium, A., 137.
 double sulphates of the rare-earth and alkali metals. IV. Double sulphates of neodymium and sodium, A., 255.
 presence of sodium and potassium fluorosilicates among the products of the present-day activity of Vesuvius, A., 1119.
 Zambonini, F., and Coniglio, L., cerium compounds in products of the present-day activity of Vesuvius, A., 816.
 Zambonini, F., and Levi, R. G., isomorphism of molybdates of the rare-earth metals with those of calcium, strontium, barium, and lead, A., 13.
 isomorphism of the molybdates of the rare-earth metals with those of calcium, strontium, barium, and lead. V. Deductions from the X-ray analysis of the molybdates of cerium, lanthanum, praseodymium, neodymium, and samarium; mixed crystals of the molybdates of cerium and calcium, A., 228.
 Zambonini, F., and Restaino, S., double sulphates of the rare-earth and alkali metals. V. Cerous ammonium sulphates, A., 636.
 double sulphates of the rare-earth and alkali metals. VI. (Cerous) cerium and potassium sulphates, A., 1015.
 cerous thallous sulphates, A., 1113.
 Zamenhof, (Mle.). See Pastureau, J.
 Zanden, J. M. van der, velocity of addition of sulphites to maleic and fumaric acids, A., 691.
 Zander, H., oil presses with disintegrating means, (P.), B., 1020*.
 determination of fat in oilseed [linseed] and oil-cake by the refractometer, B., 835.
 Zanetti, J. E., and Beckmann, C. O., esters of furfuroic acid, A., 620.
 Zanetti, J. E., and Kerr, P. F., dimorphism of furfuryl furate, A., 564.
 Zanicoli, R., recovering metals from slags, (P.), B., 331.
 Zanicoli, H. See also Boggibière, C. G.
 Zanko, A. M., electrical conductivity as a basis for physico-chemical analysis, A., 910.
 Zartner, W. R., crystallography and optical properties of monobromotyrosine, A., 401.
 Zawadzki, J., Konarzewski, J., Lichtenstein, W. J., Szymankiewicz, S., and Wachstein, J., decomposition of alkaline-earth sulphates. I., II., and III., A., 368, 923.
 Zawadzki, J., kinetics of chemical reactions. I. Velocity of thermal decomposition of chlorous oxide, A., 362.
 kinetics of chemical reactions. III. Velocity of hydrolysis of acetylcitric acid, A., 363.
 kinetics of chemical reactions. II. Velocity of nitration of phenols, A., 364.
 kinetics of chemical reactions. IV. Velocity equation of the hydrolytic decomposition of α -bromopropionic acid. V. α -Bromobutyric acid, A., 914.
 Zawidzki, J., and Vitkovski, T., velocity of hydrolysis of aqueous solutions of alkali metal cyanides, A., 363.
 Zaykovski, J., effect of calcium and inorganic phosphorus on milk, A., 539.
 action of rennin on the proteins of milk, A., 543.
 Zaykovski, J., and Pavlovski, N. M., the enzymes of new-born calves, A., 543.
 Zdanowich, J. O., manufacture of cellulose derivatives [acetate], (P.), B., 152.
 making cellulose acetate directly spinnable from reaction mixtures in commercial form, (P.), B., 1010*.
 Zeche M. Stinnes, separation of low-temperature tar into phenols and hydrocarbons, (P.), B., 184.
 production of light oils from low-temperature tar or heavy oils, (P.), B., 576.
 Zeche M. Stinnes, and Correll, A., purification of phenols, (P.), B., 815.
 Zeche M. Stinnes, and Ulrich, F., purification of phenoxide liquors, (P.), B., 815.
 Zeche M. Stinnes, and Weindel, A., separation of constituents of low-temperature coal-tar without distillation, (P.), B., 432.
 treatment of low-temperature tar phenols [to prevent darkening under the action of light], (P.), B., 815.
 production of stable, non-resinifying products from low-temperature tar, (P.), B., 865.
 Zeche M. Stinnes, Weindel, A., and Kiemstedt, H., distillation of [benzol] wash-oil, (P.), B., 230.
 recovery of acetone from light oils, (P.), B., 264.
 Zeche M. Stinnes. See also Weindel, A.
 Zechmeister, L. and Rom, P., reduction of nitro- to azoxy-compounds by magnesium and ammonium chloride solution, A., 720.
 Zechmeister, L., and Vrabély, V., ajkáite [an organic mineral from Hungary], A., 934.
 Zeehner, K. See Kremann, R.
 Zechowitz, E. See Joffé, A.
 Zeh, L. See Duisberg, W., and Farbenfabr. vorm. F. Bayer & Co.
 Zeidler, G. See Wolff, Hans.
 Zeidler, R., carbonising and gasifying apparatus, (P.), B., 861.
 Zeidler, W. See Simon, P.
 Zeitfuchs, E. H., thermal expansion of California petroleum oils, B., 116.
 specific heats, heats of vaporisation, and critical temperatures of California petroleum oils, B., 181.
 Zeitlin, A., tensile strength of cold-vulcanised rubber, B., 204.
 Zeisin, S. M., solubility of potassium halides in alcohol-water mixtures, A., 671.
 Zeitschel, F. O. See Deppe Söhne, A.
 Zeitschel, O., and Schmidt, Harry, stereoisomerism in the menthol series, A., 1250.
 Zelinski, N. D., artificial petroleum from Balkash sapropelite, B., 226.
 Zelinski, N. D., [with Titz, I. N.], catalysis and the deformation of molecules, A., 277.
 Zelinski, N. D., [with Turova-Pollak, M. B.], inactivation of catalysts during the transformation of organic compounds, A., 365.
 Zelinski, N. D., and Maxorov, B., insulating material from sapropel tar, B., 121.
 Zelinski, N. D., and Rakuzin, M. A., adsorption of mercury vapour by activated wood charcoal, A., 1090.
 Zelinski, N. D., and Zinjadze, S. R., determination of fat in animal tissues and in entire organs, A., 1283.
 Zeller, O. A., and O'Hara, B. M., reduction of zinc oxide by carbon, B., 95.
 Zeller, H., action of drugs and irradiation on yeast. I. Basis of the Arndt-Schulz law, A., 758.
 action of drugs and irradiation on yeast. II. Proof of action of Röntgen rays on substances by means of yeast, A., 867.
 action of ammonium salts on yeast fermentation, A., 1001.
 action of nitrogenous substances on yeast fermentation. V., A., 1177.
 increase of yeast fermentation by urine. VI., A., 1177.
 Zeller, P. J. A. See Rudolf, W.
 Zeliner, H. See Kalb, L.
 Zeliner, J., comparative plant chemistry. X., XII., and XIII. Chemistry of barks. II., III., and IV., A., 646, 983, 1281.
 Zeliner, J. See also Stern, F.
 Zellstoff-fabrik Waldhof, Schneider, A., and Hangleiter, C., system for boiling cellulose, (P.), B., 208.
 Zellstoff-fabrik Waldhof, and Taussig, R., electrolysis of alkali chlorides with horizontal diaphragms, (P.), B., 592.
 Zellstoff-fabrik Waldhof, and Zickmann, P., preparation of protocatechuic acid and pyrocatechol, (P.), B., 173.
 Zellstoff-fabrik Waldhof. See also Clemm, H., and Hangleiter, C.
 Zemplén, G., decarboxylation of tyrosine and leucine, A., 402.
 degradation of reducing bioses. I. Direct determination of the constitution of cellulose, A., 822.
 degradation of reducing bioses. III. Direct elucidation of the constitution of lactose, A., 1229.
 Zemplén, G., and Braun, G., reducing power of methylated sugars, A., 149.
 degradation of reducing bioses. II. Constitution of turanose and melezitose, A., 1229.
 Zerban, F. W., and Mull, J., electrical conductivity method of determining the ash content of raw cane sugars, B., 717.
 Zerbe, K. See Spilker, A.
 Zerevitinov, T., determination of alcohols and phenols in essential oils by means of magnesium methyl iodide, B., 720.
 Zernik, F. See Erdöl- und Kohle-Verwertung A.-G.
 Zérvás, L. See Bergmann, M.
 Zetsche, F., and Aeschlimann, F., organic phosphoric acid compounds. V., A., 1226.
 Zetsche, F., and Arndt, O., purification of xylene for use as solvent for catalytic reduction, A., 405.
 Zetsche, F., Enderlin, F., Flitsch, C., and Menzi, E., utility of various solvents for the catalytic synthesis of aldehydes from acid chlorides, A., 405.
 Zetsche, F., Flitsch, C., Enderlin, F., and Loosli, A., catalytic reduction of several acid chlorides, A., 402.
 Zetsche, F., and Hubacher, M., conversion products of dibenzoyl-d-tartaric anhydride, A., 598.
 Zetsche, F., and Loosli, A., formation and ageing of written characters. II., A., 67.
 organic derivatives of phosphoric acid. III. and IV. Determination of iron. I. and II., A., 705, 1242.
 Zetsche, F., and Zala, P., method for dehydrogenating alcohols, A., 614.
 Zetsche, F., and Zurbrügg, E., organic derivatives of phosphoric acid. II. Esters of β -nitro- β -hydroxymethylpropane- α -diol, A., 497.
 Zeuner, H. See Ruff, O.
 Zickmann, P. See Zellstoff-fabrik Waldhof.

Ziegler, K., and Fries, F. A., tervalent carbon. IV. Polyaryl-1-methyl-dihydropyridyls, A., 410.

Ziegler, K., Fries, F. A., and Salzer, F., tervalent carbon. V. Dissociation of bischromenyls and the use of chromous chloride for the preparation of free methyl radicals, A., 955.

Ziegler, K., and Schnell, B., tervalent carbon. III. Pentaphenylcyclopentadienyl, A., 57.

Ziegler, M. R. See Schlutz, F. W.

Zieley Processes Corporation, distilling petroleum oils and other liquids under high vacuum, (P.), B., 525.

Zielstorff, W., Keller, A., and Spuhrmann, E., manuring experiments with town sewage, B., 764.

Ziese, W. See Kuhn, R.

Ziese, W. See Farbenfabr. vorm. F. Bayer & Co., and I. G. Farbenind. A.-G.

Zilva, S. S. See Daubney, C. G.

Zimmer, F., and Lederwerke M. Zimmer Akt.-Ges., production of decorative leather or like pliable skin goods, (P.), B., 1022.

Zimmerfeld, A., red and green shades of Indanthrene Blue RS and GCD, B., 264.

Zimmerli, C., Chem.-Tech. Fabr., degreasing agent [for textiles], (P.), B., 404*.

Zimmerman, A. C. See Daniels, S.

Zimmerman, A. O. See Dinsmore, R. P.

Zimmermann, G. See Müller, Ernst.

Zimmermann, P. See Meisenheimer, J.

Zimmermann, W., photo-electric measurements on liquid surfaces, A., 886. anise oil and star-anise oil, B., 298.

Zimmermann, W. See also Küster, W.

Zimmermann, A., preparation of "herapatite," A., 744.

Zimmermann, A., and Contin, M., production of polarising surfaces by the deposition of "herapatite" on vertical plates, A., 706.

Zimpelmann, E. See Halban, H. von, and Zschimmer, E.

Zing, E., diffusion of carbon in α -iron, B., 669.

Zink, J., alkali formation in soils, B., 1023.

Zinke, A., and Bensa, F., process for manufacturing aminoperylenequinones, (P.), B., 628*. manufacturing perylene compounds of quinone character, (P.), B., 659*.

Zinke, A., Hanselmayr, F., and Bensa, F., process for manufacturing vat [perylene] dyes, (P.), B., 626*.

Zinke, A., Pongratz, A., and Bensa, F., halogenising perylene, (P.), B., 626*.

Zinke, A., Shoepfer, H., and Bensa, F., manufacturing a perylene vat dye, (P.), B., 265.

Zinke, A., Springer, R., and Schmid, A., perylene and its derivatives. XI, A., 71.

Zinke, A. See also Pongratz, A.

Zind, E., potentiometric standardisation of titanous chloride solution, A., 592.

Zind, E., and Rienäcker, G., volumetric determination of thallium, A., 703. potentiometric titration of mercury alone and in the presence of other metals, A., 929.

Zind, E., and Vanino, L., preparation of pure bismuth vanadate, (P.), B., 321.

Zinazade, S. R., nutrient solution [for plants], A., 1280.

Zinazade, S. R. See also Zeliniski, N. D.

Zielberger, L., production of beer, (P.), B., 211.

Zitscher, A. See Chem. Fabr. Griesheim-Elektron.

Zitzke, O., rectification of liquids, (P.), B., 729.

Ziv, L., determination of phosphorous and hypophosphorous acids and calcium hypophosphite by oxidation with potassium permanganate, A., 490.

Zlatarov, A., phytobiochemical studies. II, A., 210.

Zlatewa, M. See Skraba, A.

Zmaczynski, E., bromination and iodination of organic compounds, A., 604.

Zobel, F. See Braun, J. von.

Zocher, H., optical methods for the investigation of anisotropy in colloids, A., 122.

Zocher, H. See also Berkemann, S., and Frenndlich, H.

Zöllner, C., [quinoline derivatives. II.], A., 525.

Zöllner, C. See also Chem. Fabr. auf Aktien (vorm. E. Schering).

Zohe, L. A., apparatus for dehydrating liquids, (P.), B., 696.

Zolkevici, A. J. See Naddson, G. A.

Zoller, H. F., making edible alkali caseinate, (P.), B., 963.

Zollinger, E. H., increasing the viscosity of oils, (P.), B., 21.

Zollman, H. See Harkins, W. D.

Zoul, C. V., and Celite Co., demulsification of oils, etc., (P.), B., 353. filtration and treatment of liquids, (P.), B., 424.

Zscharn, A. See Koenigs, E.

Zschimmer, E., and Dietzel, A., temperature-time curves of the visible devitrification of plate glass, B., 877.

Zschimmer, E., Grisar, C. M., and Meess, H., signal green and the absorption of copper oxide in glasses of various compositions, B., 877.

Zschimmer, E., and Leonhardt, E., variation of the "cone" squatting point of whiteware glazes with change of chemical composition, B., 878.

Zschimmer, E., Zimpelmann, E., and Riedel, L., fining of pure and aluminous alkali-lime-silicate glasses with saltcake or arsenic, B., 876.

Zsigmondy, R., hydrogels and hydrates, A., 473. fine-pored filters and a new ultra-filter, A., 815.

Zucker, T. F., and University Patents, Inc., determining the physiological value of remedial and medical substances [antirachitics], (P.), B., 172.

Zumstein, F. See Kuhn, R.

Zumstein, R. V., absorption spectrum of manganese vapour in the visible and ultra-violet, A., 107. absorption spectrum of tin vapour in the ultra-violet, A., 453. absorption spectra of tellurium, bismuth, chromium, and copper vapours in the visible and ultra-violet, A., 650. M -series of tungsten, A., 1072.

Zumstein, R. V. See also Hulthén, E.

Zhrbrück, E. See Zetsche, F.

Zuyderhoudt, F., and Zuyderhoudt, F., retort for the continuous production of low-temperature coke, (P.), B., 861.

Zuyderhoudt, F. See Zuyderhoudt, F.

Zygeintzov, M. See Hammick, D. L.

Zyjaginstsev, O., ternary salts of rhodium, A., 698.

Zyjaginstsev, O., Korsunski, M., and Seljakov, N., div-manganese in native platinum, A., 934.

Zwaardemaker, H., balance in radiophysiological equilibria shifted by β -adrenalin towards the α -side and by d -adrenalin towards the β -side, A., 554.

Zwaardemaker, H., and Feenstra, T. P., cathode rays as substitutes of potassium, A., 319.

Zwarenstein, H., creatinine and uric acid metabolism, A., 973.

Zwick, K. G. See Booth, H. S.

Zwicknagl, K., Bettendorf's reaction, A., 371.

Zwickly, F., theory of the specific heats of electrolytes, A., 462. theory of specific heat of solutions, A., 668. quantum theory and the behaviour of slow electrons in gases, A., 878. transfer of energy from electrons to atoms, A., 878.

Zwickly, J., oil-gas generators, (P.), B., 575*.

Zwikker, C., physical properties of tungsten at high temperatures, A., 893. thermionic emission of tungsten, molybdenum, thorium, zirconium, and hafnium, A., 1188.